In the matter of the
Minnesota Railroad and Warehouse Commissioners'
proposed Schedule of the Classified Rates.

MINNESOTA
RAILROAD and WAREHOUSE
COMMISSIONERS

MARCH, 1906

Argument on behalf of the
Chicago Great Western Railway Company,
By A. B. STICKNEY, President.

The question under consideration is not a question of a particular rate, but of a schedule of all the rates pertaining to the commodities which are classified.

Therefore, the first question to be considered is the fundamental principles of a schedule of rates.

The direct cost of transportation naturally divides into two items. (1) Cost of terminal service. (2) Cost of straightaway haul, after the train is made up and started.

This being the case, as every movement of freight, regardless of the shortness of the distance hauled, involves the expense at the forwarding, and the expense at the receiving station, therefore, in making the mileage schedule, which the commission proposes, naming rates for each five miles of haul, the rate for the first five miles should include the two terminal expenses.

The schedule which has been presented by the Commissioners recognizes this principle. Therefore, however much I may disagree with the Commission as to the adequacy of the amount which its schedule allows for terminal expenses, I am bound to admit that in this respect the schedule the Commission has presented is correct in principle.

After the two terminal expenses are provided for and the car is in the train ready to start, the straightaway haul commences.

It seems evident that if it costs the unknown amount represented by X to haul it the first five miles of straightaway haul, it will cost the same X amount to haul it the second five miles, and so on. Therefore, I am unable to see why the principle which has been adopted by the Commission of adding a constant quantity for each mile of straightaway haul is not correct in principle. In fact, after years of consideration, I feel certain it is correct in principle.

Besides, the principle is supported by all the precedents, because all the schedules which have been made since the first railway in this country commenced making schedules, when not distorted by competition, have recognized the principle of adding to the terminal expenses a constant quantity per mile for the straightaway haul.

I am compelled to say, however, that I have never seen a schedule made by a railway where the constant quantity for each mile of haul has been worked out so systematically and exactly as in the schedule which has been presented by the Commission. In the matter of symmetry and exactness in this and other respects, the Commission's schedule excels any schedule I have ever seen.

It will be noticed that in preparing the schedule under consideration, the Commission has added a certain constant quantity per mile of haul up to a distance of 200 miles, and beyond the distance of 200 miles the constant quantity which is added per mile hauled is just one-half of the constant quantity added between five miles and the 200 miles of haul.

This principle is justified by the following conditions:

In order to expedite the movement of freight and reduce the cost of transportation, all railways having through freight enough run one train only as a way-freight-train, taking on and delivering freight at each local station; and all other trains are run as through-trains, stopping at few local stations.

The way-freight-train runs only by daylight, because experience has proven that it is both dangerous and too expensive to do way-station work in the dark. The way-freight-train has great difficulty in making one hundred (100) miles in a day of 24 hours, while the through-freight-train runs day and night, and easily makes from 240 to 360 miles, and even more, in a day of twenty-four hours. For this reason, and for others which will be considered

later, the "straightaway haul" of the way-freight-train is much more expensive per mile than the straightaway haul of the through-freight-train.

Generally speaking, all local freight, such as the Commissioners' schedule contemplates, on a line which has through traffic enough, is carried one day one hundred miles or less on a way-freight-train, and the balance of the distance on a throught-freight-train.

To illustrate: the local freight which is received at its St. Paul station to-day by the Chicago Great Western Company, destined to local stations between St. Paul and Hayfield (Hayfield being the end of the way-freight run) is loaded into a car, carried and peddled out on the way-freight-train.

All such freight as is destined to stations between Hayfield and Oelwein (Oelwein being the end of the next way-freight run) is loaded into another car and carried from St. Paul to Hayfield on a fast through-freight-train, and at Hayfield it is taken by the next way-freight-train and peddled out by it at the stations between Hayfield and Oelwein.

All such freight as is destined to stations beyond Oelwein is loaded into still another car and carried on a fast through-freight-train to Oelwein; and at Oelwein it is taken by the next way-freight-train and peddled out at the stations between Oelwein and the end of the next way-freight run. And this process of expediting the movement of such freight is repeated as to the way-freight runs beyond.

From this illustration, it will be seen that all local freight is carried somewhere on the line for a distance of about one hundred miles on a way-freight-train at much greater expense than on through-freight-trains.

Therefore, in making a schedule, the additional expense of carrying local freight on way-freight-trains should be provided for.

On lines which have not sufficient traffic to require through-freight-trains (most of the branch and purely local lines in this state have not) such local traffic must necessarily be carried the whole distance on way-freight-trains.

The Commissioners in preparing their schedule have recognized these conditions by allowing double the constant quantity per mile for the straightaway way-freight-train haul on the first two hundred miles that is allowed on the next two hundred miles, which would represent the through haul as distinguished from the more expensive way-freight haul.

Except as to the length of way-freight haul and the relation between the constant quantity allowed for the way-freight haul, and the constant quantity allowed for the through-freight haul, the plan of construction of the Commission's proposed schedule *is correct in principle.*

In preparing the schedule which has been submitted, the Commissioners first built up the rates on first-class goods, and then made all other rates a certain precentage of that rate at every point. I regard this, also, as correct in principle, because there is no reason why any class rate should be a certain percentage of the first-class rate at one point, and a different percentage of the same rate at another point.

In every respect, therefore, I regard the schedule which has been presented by the Commissioners as correct in principle, and more systematically and exactly worked out than any schedule made by any State Commission, or by any railway company, which has ever come under my observation.

The actual rates which are named in the Commissioners' schedule are considerably lower than the rates which have been made by the railway companies, and which are now collected in this state, and in my judgment the Commissioners' rates are unreasonably low. I will state the basis upon which my contention in respect to the unreasonableness of the actual rates is founded later. For the present, I am considering only the fundamental principles which should govern the construction of a schedule of rates.

The Iowa and the Illinois Commissioners have each made a schedule of rates. I desire to call attention to the plan of constructing the Iowa and the Illinois schedules, and for this purpose, and for the purpose of comparisons, I have prepared a diagram (No. 1) of the proposed Minnesota rates, and diagram (No. 2) of the Iowa rates, and diagram (No. 3) of the Illinois rates, on profile paper, to which I now call attention.

The first thing which strikes the eye upon examination of Diagram No. 1 is the symmetry and mathematical exactness of its construction. And the first thing that strikes the eye upon an examination of the Iowa rates is its want of symmetry and mathematical exactness. In its construction, the Iowa Commissioners violated every principle of correct construction which we have been considering, and which the Minnesota Commission has approved and followed in constructing its proposed schedule, except that the rate for the first five miles should cover the two terminal expenses.

No one can examine the Iowa schedule without being convinced that it was hastily compiled without giving due consideration to the fundamental principles of schedule construction.

If the construction of the first-class rate be examined it will be found that for the first forty-five miles of straightaway haul it adds to the terminal expenses the constant quantity of 1.33 mills per mile; for the next fifty miles the constant quantity is reduced to .8 of a mill per mile; then for the next two hundred miles the constant quantity is increased to away above even the first constant quantity to 1.6 mills per mile, producing the extraordinary line which the diagram shows.

I do not hesitate to positively assert that there is no conceivable reason, in the absence of competition, which railway commissions necessarily disregard, why a railway company having hauled any commodity one hundred miles should receive a larger rate per mile for the next two hundred miles of straightaway haul. The statement of the proposition shows its absurdity.

I next call attention to the relation between the rates in the Iowa schedule at different lengths of haul, using the first-class rate as the 100 per cent. basis, for the purpose of making the comparison.

The following tabulation of such percentages shows the inconsistency of the Iowa rates in their relations to each other:

Percentages of the Various Classes to the First Class at Different Distances

	AT 5 MILES	AT 50 MILES	AT 100 MILES	AT 300 MILES	AT 400 MILES
	% of 1st C	% of 1st C	% of 1st C	% of 1st C	% of 1st C
Second Class.	85.8	85.0	85.0	71.5	73.7
Third Class...	66.8	66.5	66.7	53.6	57.4
Fourth Class.	50.0	50.0	50.0	44.6	49.2
Fifth Class....	35.7	35.0	35.0	35.7	41.0
Class "A".....	35.0	35.0	37.5	40.0	45.0
Class "B".....	35.0	35.0	35.0	31.3	36.9
Class "C".....	30.0	30.0	30.2	26.8	32.8
Class "D".....	25.3	25.5	25.2	22.4	28.3
Class "E".....	20.0	20.0	20.0	19.6	26.2

Look at that table! Examine it critically and explain, if you can, why a second-class rate should be 85 per cent. of the first-class rate for 100 miles, drop down to 71 per cent. at 300 miles, and then bob up to 74 per cent. at 400 miles. The similar absurdity exists in respect to the relation of all the other rates.

Tell me why the Fifth-Class, Class "A" and Class "B" rates should be the same—35 per cent.—of the First-Class rate for fifty to one hundred miles, and then the fifth-class rate should bob up and the Class "B" rate should bob down, and at 400 miles should be 41—45 and 36 per cent. respectively!

No Philadelphia lawyer could answer that conundrum. It is impossible to give a why, because there is no honest why.

The fact is, the Iowa schedule was made by a commission which was subservient to the domination of a governor who was daft on the subject of railways and railway rates. He pretended to believe that Iowa railways did not cost over $10,000 per mile, and should not be allowed to earn interest on more than $10,000 per mile and demanded that the Commissioners should make a schedule on that basis. Afterwards, he wrote and published a pretentious book containing the same propositions.

Three years ago I built a railway over a farm belonging to him, on which he did not live, and the railway did no damage to the buildings or anything of that kind, and that same man who as governor and author declared that railways could be built and equipped for $10,000 per mile demanded $8,000 per mile for right of way.

The fact is that the Iowa rates were intended to be cunningly contrived so as to be just sufficient, provided the Interstate business was carried on the same basis of rates, to pay interest on a cost of about $10,000 per mile.

There is a cunning trick in the Iowa schedule. The state traffic of Iowa, which begins and ends within the state, which only is affected by the schedule, is comparatively small, because there is not a market town for the products of the farm within the state. Practically, therefore, the only traffic which is affected by the Iowa Commissioners' rates is the traffic pertaining to a few jobbing houses, and a comparatively small quantity of coal.

The evidence in this case shows that the jobbing traffic moves only short distances, an average of, say, 75 miles. The average distance was even shorter when the schedule was made. Hence, if the schedule was made so as to produce low rates for short distances, the rates for longer distances were practically only paper rates, and the Commission cared nothing about them. This is really the secret of the illogical lines of the schedule, which has been pointed out.

I was personally present when the schedule was under discussion, and I heard the Commission declare over and over

again that it cared nothing about the rates for more than one hundred to one hundred and fifty miles. Hence, to give the schedule some semblance of fairness, when considered as a whole, the Commission turned the purely paper rates, which had no effect upon Iowa traffic, sharply upwards at the one hundred mile point, as shown on the diagram.

The fact is the Iowa schedule was made during a period of intense public excitement. It was forced through the Commission by the governor whom I have described, and because they affect only a comparatively small volume of traffic the railways cowardly submitted, rather than appeal to the courts for relief.

Hence, I submit, as nobody claims that the Minnesota roads have been, or could be, built and equipped for $10,000 per mile (the equipment alone of the Great Western Road has cost a good deal more than $10,000 per mile) that the Iowa schedule is not entitled to be regarded as evidence of correct schedule construction, or as evidence upon the question of the reasonableness of the rates proposed by the Minnesota Commission, which are now under consideration.

Next, let us examine the fundamental principles of the construction of the Illinois Commissioners' schedule (Diagram No. 3) which is built upon the parabolic curve theory, which has long since been discarded by students of schedule construction.

The fundamental principles of a schedule of rates has been a subject of consideration during all the years since the advent of the railway.

From the beginning it has been conceded that the rates for the shortest haul should include the terminal expenses at both the forwarding and receiving stations. But there has been confusion of ideas as to the principle of building up the rate to compensate for the straightaway haul, growing out of the universally conceded proposition that the rate per ton per mile should be less for a long haul than for a short haul. And, strange as it may seem, there have been men who could not understand that a schedule built upon the plan of the

proposed schedule of the Minnesota Commission of adding to the two terminal expenses a constant quantity per mile for the straightaway haul would produce a less rate per ton per mile for the long than for the short haul, because the terminal expenses are a larger proportion of a short than a long haul, and because the rate per mile for the straightaway way-freight haul should be larger than the rate per mile for the through haul.

In the schedule of the Minnesota Commission the first-class rate, and the rate per ton per mile for different distances is as follows:

For	5	miles	is	12.	cts.	per	cwt.	$2.40	per	ton	48.00c	per	ton	per	mile
"	100	"	"	30.6	"	"	"	6.12	"	"	6.12c	"	"	"	"
"	200	"	"	50.2	"	"	"	10.04	"	"	5.00c	"	"	"	"
"	300	"	"	60.0	"	"	"	12.00	"	"	4.00c	"	"	"	"
"	400	"	"	69.8	"	"	"	13.96	"	"	3.49c	"	"	"	"

That is to say, the rate per ton per mile for:

5 miles is 48.00 cents,
100 miles is 6.12 cents,
200 miles is 5.00 cents,
300 miles is 4.00 cents,
400 miles is 3.49 cents.

A similar analysis of the Class "E" rate will show that the rate per ton per mile for:

5 miles is 10 cents,
100 miles is 1.24 cents,
200 miles is 1.00 cent,
300 miles is 0.80 cent,
400 miles is 0.70 cent.

And all other rates will show the same proportional relation between the short and long haul rates, all produced by terminal expenses and the straightaway haul, as before explained.

Some years ago a wild-eyed, half engineer and half idiot, fellow came into my office and said:

"Your plan of building up a schedule of rates

by adding to the terminal expenses a constant quantity for each mile of straightaway haul won't work, because it would make the same rate per ton per mile for a long haul as for a short haul, which is not right. The only way to get a less rate for a long haul than a short haul is to build up the rates, not on straight lines, but on a parabolic curve."

I tried to demonstrate how the constant quantity plan would produce lower rates per ton per mile for the long than the short haul, and how the parabolic curve, if continued a sufficient distance, would require freight to be hauled for, say two thousand miles for the same actual rate as for a much shorter distance. But his head was full of parabolic maggots and he could see nothing else.

Now, an inspection of the Illinois Commissioners' rates (Diagram No. 3) shows that the Illinois Commissioners were infected with the parabolic curve maggots, so, in the construction of their schedule, instead of adding a constant quantity for the straightaway haul, they added a constant quantity for a distance then half that constant quantity for another distance, and then half of that quantity for another distance, and so on, a principle which, if continued, would make the same actual rate for about 1300 miles as for 2000 or 3000, or more miles. I have a diagram illustrating this, to which I will call attention later, which shows the absurdity of the parabolic curve system.

In the matter of the relation between the rates of the different classes, while not as systematic as the proposed Minnesota schedule, the inconsistencies of the Illinois schedule are by no means as great as in the Iowa schedule.

The following table of percentages shows the relation between the classes established in Illinois:

	AT 5 MILES	AT 100 MILES	AT 400 MILES
	% of 1st Class	% of 1st Class	% of 1st Class
Second Class.....	86.8	79.3	82.9
Third Class.....	71.6	61.5	65.7
Fourth Class.....	57.7	50.0	51.6
Fifth Class.....	46.2	40.0	41.3
Sixth Class	35.4	32..1	33.5
Seventh Class.....	31.6	29.1	30.1
Eighth Class.....	28.5	23.5	25.4
Ninth Class.....	24.6	19.1	21.0
Tenth Class.....	22.7	16.9	18.5

While these varying percentages show that the Illinois schedule was not worked out with the same care as the proposed Minnesota schedule has been worked out, yet, unlike the Iowa schedule, an inspection of the Illinois schedule (Diagram No. 3) carries a conviction that it is an honest schedule, worked out with considerable care.

As such, it is entitled to be considered for what it is worth as evidence of reasonable rates.

Some time during 1905 the Illinois Commissioners notified the railway companies that they proposed to arbitrarily reduce their schedule of class rates twenty per cent., to take effect January 1, 1906.

I am informed that the companies were granted permission to make a showing and arguments against such action, and that after two or three days' hearing the Commissioners said, in effect, that there was no use talking longer, *as the order had been made before the hearing commenced.*

It is such arbitrary and star-chamber actions as this on the part of State Commissions—making orders reducing annual revenues hundreds of thousands of dollars, equivalent to a destruction of millions of dollars of railway capital, by a

stroke of the pen, with slight, if any, consideration, as though the throwing away of such vast revenues and capital was a matter of no more importance than the casting off of a worn out garment—which makes the opposition against the passage of the rate bill, now pending in Congress, so strenuous.

The law courts never act in matters involving the smallest amount, with such slight consideration. In a suit involving $100, or even less, they patiently hear all the relevant testimony which either party cares to produce, and then give the testimony due consideration before rendering a judgment. If it is a case tried without a jury, the court writes its findings of fact, based upon the testimony and its conclusion of the law, in rendering its decision.

Where large amounts are involved, at least equal consideration is given before arriving at its conclusion.

Few courts in this country, in the history of its jurisprudence, have had before it a suit involving as large an amount of revenue and capital, the proper decision of which would require the investigation of so many facts, as was involved in the reduction which was made by the Illinois Commissioners in the off-hand manner described. Taking these facts into consideration, is it any wonder that the railway companies should insist, when they feel that the Commissioners have done them an injustice, upon their rights to have all such orders made by railway commissions reviewed by the courts before they become effective?

When the railway commissions get to the point of feeling the same responsibility as to their duty to hear evidence, and to weigh the evidence, and to decide upon the evidence, as the courts, then, but not until then, in my judgment, all opposition on the part of railways to the legislative control of their rates will cease.

The decision of the Interstate Commerce Commission in the live stock case, which has recently been overruled by the court, if it had been allowed to stand would have reduced the revenues of three great railway companies, alone, approximately $500,000 each, or an aggregate of $1,500,000 annually,

which, capitalized at 5 per cent., would be equivalent to the destruction of $30,000,000 of railway capital. But the Interstate Commerce Commissioners at the hearing did not seem to be impressed in the slightest degree with their responsibility.

They limited the hearing to a few days, and did not confine the witness to legal and pertinent testimony, like a court, but, disregarding all rules of testimony, they allowed all kinds of statements, relevant and irrelevant, to be made by the witnesses, and so little interest did the Chairman take in the case that he left the court room before the testimony was completed, because he had engaged sleeping accommodations on a certain train.

When the case came to be reviewed by the court, there was no limit of time set upon the hearing in advance. Confining the evidence to the well established rules of evidence the court patiently listened, day after day, until all the testimony which either party desired to present was in. After the testimony was in, the court still patiently listened to the analysis of the testimony by counsel.

To such an extent has the inattention of commissions to the evidence been carried, that whenever a railway company is served with notice to show cause why any rate should not be reduced, the railway lawyers usually say: "What's the use?" It is this feeling, "What's the use," which permits so many reductions which the railways know are unjust, to go practically by default.

In the matter of the twenty per cent. reduction by the Illinois Commissioners, the only modification of their arbitrary order which the railway companies have been able to obtain is a suspension, for the time being, of the order as to the five lower classes, leaving it effective only as to the higher classes, which modification produces the schedule shown in Diagram No. 4.

These reductions destroyed the former relation between the rates of the various classes, and produced some absurd

complications between the fifth, sixth and seventh classes, which the eye readily detects on the diagram.

Considering the circumstances under which the reduction was made, I do not think the reduced rates of the Illinois Commission, Diagram No. 4, are entitled to be considered as evidence of reasonable rates.

Still considering the fundamental principles to be observed in the construction of a schedule of rates, let us next examine the schedule of mileage rates which have been made by the freight agents, and which have been in force for several years in Minnesota.

There are two such schedules. One applying to the roads south of St. Paul, such as the Chicago, Milwaukee & St. Paul; the Chicago, St. Paul, Minneapolis & Omaha; and the Chicago Great Western lines: and one applying to the roads north of St. Paul, such as the Northern Pacific; the Great Northern; and the Soo Lines. The schedule applying to the northern lines names materially higher rates than the schedule applying to the southern lines.

It must be borne in mind that these are mileage rates, and all problems resulting from competition have been disregarded the same as state commissioners disregard such problems in making their schedules.

I propose to consider the construction of these schedules (Diagrams Nos. 5 and 6) together, as there is substantial uniformity in the matter of construction.

An inspection of these diagrams shows:

That the principle of including the two terminal charges in the first five miles rate has been regarded.

That, in a general way, the principle of adding a constant quantity for the straightaway haul, with some slight regard to the parabolic curve, has also been regarded.

The principle of using the first-class rate when thus built up as a basis for all the other rates, and making each of the other rates a certain percentage of the first-class rate, has also been regarded, except that the lines have not been worked out with that mathematical accuracy which is in the proposed Minnesota Commissioners' schedule, but they are built up by a system of steps and flats, in that sort of slovenly, haphazzard, by-guess and by-god plan, with absolute disregard of mathematics, which is usually incident to all such work which is done in the offices of the railway freight departments.

These steps and flats, which compel a village or town located at the 65-mile post, on the shipment of a carload of Class "E" freight, to pay one cent per cwt., or four to six or seven dollars a car more than the village on one side, which is only five miles distant, while the villages five, ten, fifteen and twenty miles distant on the opposite side pay no more, are discriminations between localities, building up one at the expense of the other, which are so bitterly complained of by all the people of the whole nation, and makes them enemies of the railways.

There is no sense or justice in it. It works no advantage, but, in fact, a disadvantage, to the railway, and is done simply because the men who make railway schedules are too lazy or indifferent or incompetent to make the simplest mathematical calculations.

As the fundamental principle of making a schedule of rates is a most important factor in my argument, I feel it incumbent, in order to be fair, that I should state the objections which have been made to constructing such schedules on the plan which has been adopted by the Minnesota Commission, and which we are now considering.

I have been a consistent advocate of this plan of making schedules for a great many years. In 1892 I published a book in which I advocated it. In various public addresses I have advocated it. On the witness stand in the United States Court but a few months ago, I expressed an opinion that schedules should be made on this plan.

Hence, for more than fifteen years I have been the target, so to speak, of all the opposition to such a plan. I am bound to confess that most, and perhaps all, traffic officials have contended that such a plan is impossible for long distances.

At the recent hearing before the Committee of the United States Senate, a Senator asked a traffic official if Stickney's method of making rates, as explained in his book, could be used. The answer was, as usual, "It is impossible."

The only reason which has ever been given by traffic officials why such a plan is impossible is that if a schedule built upon this plan should make rates high enough to be remunerative for short hauls, it would make rates for long hauls so high that traffic would not move long distances, and that it would therefore be impossible on such a schedule to move traffic of any kind across the continent.

I admit that if this contention is correct, such a schedule would indeed be impossible. I have no doubt that the gentlemen who make this statement believe it to be true. There was a time, before I investigated the subject, that I accepted the impossibility theory as correct, and frequently, before such investigation I have used the argument of impossibility myself.

But upon investigation of the facts I saw at once that the impossibility theory was not true, and for the purpose of demonstrating the fallacy of the impossibility theory I have prepared a diagram of the Commissioners' rates extended to a distance of 2000 miles, which would more than cover the distance between St. Paul and the Pacific Coast, the distance from St. Paul to Seattle or Tacoma being about 1900 miles. (Diagram A.)

Now, the rates which are now in existence on the Great Northern and Northern Pacific Roads from St. Paul to Seattle and Tacoma, are as follows:

1	2	3	4	5	A	B	C	D	E
$3.00	$2.60	$2.20	$1.90	$1.60	$1.60	$1.25	$1.00	$ .95	$ .85

The rates which the Commissioners' tariff, extended, would make, would be as follows:

1	2	3	4	5	A	B	C	D	E
$2.168	$1.807	$1.445	$1.085	$ .868	$ .976	$ .759	$ .65	$ .552	$ .44

From this comparison, it will be seen that if the schedule proposed by the Minnesota Commission were extended, and put in force from St. Paul to the Pacific Coast, they would reduce the present rates about 27.7 per cent. on first-class, and about 48.2 per cent. on Class "E," and on all the intermediate classes proportionately.

The comparison also shows that the Minnesota Commission's proposed schedule could be raised twenty per cent., which I think is about what they should be raised, and still permit traffic to be moved from St. Paul to the Pacific Coast at less rates than are now collected.

I claim that these facts are conclusive evidence that the impossibility theory is untrue.

Now, degressing from the line of the argument as to the construction of schedules, I want to ask the Commissioners if they believe that the rates between St. Paul and the Pacific Coast ought to be reduced from 27.7 per cent. to 48.2 per cent., or an average of say 38 per cent., as their proposed schedule would reduce them, if it was put into effect over this whole vast territory.

Does the Commission realize what such reductions would mean? Let me show you what such reductions would mean.

During the panics of 1873 and 1893 the earnings of the railways fell off to such an extent that, probably, seventy-five per cent. of the railway mileage of the United States passed under the control of the courts in the hands of receivers. I have prepared a diagram of the earnings of all the railways of this country, which shows at a glance the decreases of earnings in those two great panics, which I now exhibit. (Diagram B.)

This diagram shows that the railway earnings reached their highest point, $526,000,000, in the year 1873. Then

they fell off year by year until they reached their lowest point, $473,000,000, in the year 1877. This decrease was 10.05 per cent.

Then, in the panic period of 1893, curiously enough, these earnings reached their highest point, $1,207,000,000, in the year 1893, just twenty years from 1873. Then they made one drop to the lowest point, $1,067,000,000, in 1894. This decrease was 11.6 per cent., and again placed, approximately, seventy-five per cent. of the railroad mileage of the United States in the hands of receivers.

Thus, it will be seen that the difference between prosperity and bankruptcy for railway companies is a loss of only 10 to 12 per cent. of their earnings.

With these facts before you, do you dare to take the responsibility, by putting into effect your proposed schedule, of saying that it is *your deliberate judgment* that the rates of all the railways between the Mississippi River and the Pacific Coast should be reduced, say, an average of 38 per cent.

Returning to the consideration of the principles and plan of constructing a schedule, I call attention to Diagram "C," which is the Illinois Commissioners' schedule before reduction, extended to a distance of 2000 miles on the principle of the parabolic curve of that schedule.

This schedule is constructed by adding to the terminal expenses for the straightaway haul a constant quantity per mile for a distance, then one-half of that constant quantity per mile for the next distance, then one-half of the last constant quantity for the next distance, and so on ad infinitum, thus making a parabolic curve.

It will be noticed that the actual rates increase but slightly beyond the 1,000 mile point, and reach practically the highest point at about 1300 miles, and from the 1300 mile post all the actual rates continue on practically a dead level for the remaining 700 miles, and would thus continue for any number of additional miles.

That is to say, a railway would receive no more for hauling a ton of freight for two thousand miles, three thousand,

or any number of thousands of miles than it would receive for hauling it thirteen hundred miles.

Diagram "D" shows the reduced Illinois schedule of January 1, 1906, extended in the same way, producing the same absurd results, except that the rates reach their highest point at about 1,000 miles, instead of at 1,300 miles. The highest first class rate for 1,000-2,000 or any number of miles would be only 55 cents.

These diagrams show conclusively the fallacy of the parabolic curve theory of making freight schedules.

The somewhat extensive consideration of the fundamental principles of making a schedule of rates which I have made, shows conclusively, that the proper construction of such a schedule requires that to the two terminal expenses there should be added a constant quantity for each mile of straightaway haul for a distance of one hundred to two hundred miles, representing the compensation for the straightaway haul when carried on way-freight-trains, and the expenses incident to delivering and receiving at local stations; then a smaller constant quantity per mile ad infinitum, representing the smaller compensation for the straightaway haul on through-freight-trains. And that a proper percentage relation shall be established between the different classes.

Having ascertained these fundamental principles, the process of making the millions of individual rates is simplified, because it is no longer necessary to attempt the impossible consideration of the reasonableness of each one of such rates separately, but it is only necessary to consider the reasonableness of the three factors upon which the schedule is founded, viz.:

1. A reasonable charge to cover the two terminal expenses for first-class rates as a base line.
2. A reasonable constant quantity to be added for each straightaway mile hauled on through-freight-trains; —a reasonable constant quantity to be added for each straightaway mile necessarily hauled on way-freight trains—the distance the way-freight-train rates should continue.

3. A reasonable percentage relation between the rates of the different classes.

When the reasonableness of these three factors is established, the reasonableness of all the rates is established, because all the rates are mathematical sequences of these three factors.

Let us consider these three factors in their order.

Let us begin the investigation of reasonable charges for the two terminal expenses by marshalling the charges which have been established in the various schedules which have been examined, (excepting the Illinois arbitrarily reduced schedule) represented by Diagrams Nos. 1, 2, 3, 5, and 6.

Diagram No. 1, the proposed schedule of the Minnesota Commission, seems to regard a reasonable charge for the two terminal expenses on first class freight to be.... 11.6c per cwt.

Diagram No. 2, the Iowa Commissioners' schedule ..... 13.2c per cwt.

Diagram No. 3, the Illinois Commissioners' schedule in 1905 ..... 11.2c per cwt.

Diagram No. 5, the Freight Agents' Mileage rates South of St. Paul..... 9.0c per cwt.

Diagram No. 6, the Freight Agents' Mileage rates North of St. Paul..... 4.2c per cwt.

This wide range is nearly equalized on the first five miles of haul by the difference in the constant quantity added, in the different schedules, for the straightaway haul. At the end of five miles of haul their rates are 12.6, 14, 13, 12 and 10 cents respectively. The proposed Minnesota rate, being 12.6 cents, is almost the exact average (12.25 cents) of the pre-existing four rates, which is another evidence of the conscientious painstaking with which the Minnesota schedule has been prepared. The Commissioners, necessarily having no facts upon which to base the terminal expense, did all they could do by consulting pre-existing schedules and striking an average.

It is not easy to demonstrate the exact compensation, based on cost, which railway companies are entitled to collect for terminal expenses of the respective classes.

There is a public impression that the margin of profits in railway transportation is so large that in making a schedule of rates it is not necessary to be particular about a cent per cwt., more or less. But the fact is that one mill per ton per mile is equal to $724,272 per year for a small road like the Great Western, and to $4,359,664 per year for the Northern Pacific, and to all the railroads of the United States in the year 1904, to the enormous sum of $173,613,762.

In fact, the only thing which stands between the present prosperity of the railroads of the United States and utter bankruptcy *is the insignificant amount of one mill per ton per mile in their average rates.*

It is therefore important to check the amount of these initial expenses with the greatest care.

Such expenses are all by the car, but the compensation is by the hundredweight of the contents of the car. The cost of switching, the track room occupied, all the other terminal expenses, are as much per car for a car loaded with 1,000 lbs. as for a car loaded with 80,000 pounds.

No railway keeps separate accounts of its terminal expenses, and many of the terminal expenses are so interwoven with the expense of hauling that they can only be ascertained by making a proportional division.

The General Manager of the Chicago Great Western Company has made a statement of the cost of the terminal expenses at St. Paul and Minneapolis for the month of October, 1905, and dividing these expenses by the number of loaded cars handled in and out of these stations during that month he finds the average cost per car to be $4.56. October, 1905, was the largest month's business the Great Western road ever had, and as more cars were handled the average cost is probably lower than would be the average cost for the whole year.

Since writing the above, the Auditor of the Chicago Great Western Road has made a statement of the cost of the terminal expenses at St. Paul and Minneapolis for the whole year 1905, and he finds that the average cost per car for the whole year was $5.07.

He also made a statement of the terminal expenses in Chicago for the whole year 1905, and he finds that the average cost per car for the whole year was $5.18.

But as the other statistics which I am about to use are for the first twelve days of June and the first twelve days of October, I have thought it would be, perhaps, fair to use the General Manager's estimate for the month of October only, $4.56 per car.

These cars were loaded with various weights. For illustration: some were loaded with, say, 3,000 lbs., some with 10,000 lbs., some with 20,000 lbs., some with 40,000 lbs., some with 60,000 lbs., some with 70,000 lbs., and some with 80,000 lbs., but the cost of terminal expenses per car were even more on the light loading than on the heavy loading, because the lightly loaded cars contain, generally speaking, first, second, third and fourth classes, which were loaded through the freight houses at the company's expense, while most of the heavily loaded cars were loaded by the shippers without expense to the company.

Without taking into consideration the expense which the company incurred in loading first, second, third and fourth classes, the average cost of $4.56 per car would make the cost per cwt. as follows:

3,000 lbs. load would be 15.20c per cwt.,
10,000 lbs. load would be 4.56c per cwt.,
20,000 lbs. load would be 2.28c per cwt.,
40,000 lbs. load would be 1.14c per cwt.,
60,000 lbs. load would be 0.76c per cwt.,
70,000 lbs. load would be 0.651c per cwt.,
80,000 lbs. load would be 0.570c per cwt.

This statement discloses the reason why different terminal expenses should be made in a schedule of rates upon different classes. The range in this table, which includes the commodities, as well as the classified rates, is .57c to 15.2c per cwt. The range is the schedule proposed by the Minnesota Commissioners, which includes the classes only, is from 2.2c to 11 cents per cwt.

Now, as a matter of fact, the evidence in this case shows that the Chicago Great Western Company loaded at Minneapolis during the first twelve days of June, and the first twelve days of October, less-than-car load lots, which would include the first, second, third and fourth classes, 306 carloads, with an aggregate loading of 2,262,212 lbs., or an average per car of 7,393 lbs.

At the average cost of $4.56 per car, the average cost per cwt. for one terminal expense on the four classes would be 6.2 cents. For the two terminal expenses would be 12.4 cents per cwt., which should be the average for the four classes. Distributing this average between the first, second, third and fourth classes in the relation of 100 for the first, 83 1-3 for the second, 66 2-3 for the third and 50 for the fourth class makes the terminal expenses for the first class 16.5 cents per cwt., for the second class 13.75 cents per cwt., for the third class 11. cents per cwt., and for the fourth class 8.25 cents per cwt. It is therefore my contention that in building up the first class rate, it should start with the terminal charge of 16.5 cents.

It may be answered that the terminal expenses at St. Paul and Minneapolis, owing to the cost of the terminals, would be higher per cwt. than the expenses at smaller stations where the land, especially, is much cheaper. But the volume of the business is enough larger, and the loading of the cars of first, second, third and fourth classes is enough higher than at local stations to more than equal the difference in the cost of the terminals. This is illustrated by the relative loading of these classes of freight out of Minneapolis and Mankato. At St. Paul-Minneapolis the average loading is 7,393 lbs., at Mankato only 3,590 lbs., less than one half, because that was all the freight of those classes which Mankato had to move during those twenty-four days.

Now, at the average rate of $4.56 per car, the load of 3,590 lbs. would make the terminal expense of first class 33 1-3 cents instead of 16.5 cents. This difference would much more than offset the difference in the cost of the terminals.

I have repeatedly in years past figured over the terminal expenses at the large stations and at the small stations, and have always found that it costs as much per cwt., and generally more, for terminal expenses at small stations as at large stations, owing to the much larger volume of traffic at the large stations.

Before leaving this factor of the schedule I want to answer a question which will naturally suggest itself to the Commission, viz: Why are these less-than-car-load lots so lightly loaded? Why does a railway company send out cars with a capacity to carry 50,000 to 70,000 lbs. loaded with only 3,000 to 11,000 or 12,000 lbs.?

There are two reasons:

First, because the jobbing merchants who ship the goods, and the country merchants who buy them, desire that the goods shall be shipped daily. So, in days when the aggregate purchases on any division amount to only 7,300 lbs. it is evident that only 7,300 lbs. can be loaded that day in the car going to that division.

It is also evident that by giving poorer accommodations, and holding the goods in the railway warehouse for a number of days to make a maximum carload, the railway company could afford to make a terminal expense of possibly 1 or 2 cents per cwt. lower.

But, it is my judgment, and I think it will be the judgment of the Commission, that both the jobbing merchants and the country merchants, who are the only parties interested, would be better satisfied with prompt shipment than to have the shipment delayed two, three or four days and get the rate 1 or 2 cents per cwt. lower, which, on the average shipment, would amount to about 5 or 6 cents in the aggregate upon the average daily shipments to each country merchant.

Second. The second reason for light loading is due to the heterogeneous nature of the commodities shipped, and the way they must be loaded in the car.

The commodities shipped consist of all kinds of things, in all kinds of packages, in all kinds of shapes, and all kinds of sizes. And then they must be loaded in "station order." That is to say, those destined for the station farthest away must be loaded first, and those destined for stations nearest must be loaded last, so that when the car reaches the first station the goods consigned to that station can be gotten out of the car without handling all the other goods. These conditions limit maximum loading to from 4,000 to 8,000 lbs.

During the last five or six years the Chicago Great Western road has given special attention to the loading of this less-than-car-load lots, and I have myself gone to the station in St. Paul night after night to watch the methods of loading, and the character of the load. By making this special effort, we have been enabled to increase the average load, which was 3,000 or 4,000 lbs. a few years ago, to our present average load of 7,393 lbs., as heretofore shown, which, it will be noticed, averages higher than the loading by other lines represented at this hearing.

Let us next consider the second factor of the schedule, viz:

A reasonable constant quantity to be added for each straightaway mile hauled on through-freight-trains; —a reasonable constant quantity to be added for each straightaway mile necessarily hauled on way-freight-trains,—the distance the way-freight rates should continue.

In this connection I will first examine and compare the precedents of the various schedules to the extent that it is possible to compare straight lines with parabolic curves.

The following table shows the constant quantity added for the straightaway haul on through-freight-trains by the Minnesota Commission, Diagram No. 1; by the dishonest Iowa schedule, Diagram No. 2; by the Illinois schedule, 1905, Diagram No. 3; by the Freight Agents south of St. Paul, Diagram No. 5; and by the Freight Agents north of St. Paul, Diagram No. 6.

	Per 100 Miles		
	First Class Per cwt	Class "E" Per cwt	Per ton per mile Class "E"
Minnesota, Diagram No. 1.....	10.2c	2.04c	4.0 mills
Iowa, (dishonest) Diagram No. 2...	16.0c	3.2c	6.4 mills
Illinois, 1905, Diagram No. 3.	7.0c	1.3c	2.6 mills
Freight agents south, Diagram No. 5	20.0c	3.5c	7.0 mills
Freight agents north, Diagram No. 6	21.0c	4.0c	8.0 mills

This comparison is of little value, as the extreme range is largely due to the parabolic curves in all the schedules except the proposed schedule by the Minnesota Commission. It is, however, another illustration of the absurdity of building schedules on parabolic curves.

The problem of the reasonable constant quantity to be added for the straightaway haul on through business must be determined upon experience, and, fortunately, there is in the evidence produced by the Chicago Great Western Railway Company very complete data showing this experience. But before considering this data, it is desirable to know just what commodities are covered by the Class E rates, which are the lowest rates named in the Commissioners' schedule.

In the classification the commodities pertaining to this class are not separated, but all of the commodities classified are arranged alphabetically and the class to which they belong indicated by figures following each commodity, so that it is not easy, by inspection of the classification schedule to see just what commodities pertain to each class. In a general way all of the numbered and lettered classes have been regarded as ordinary merchandise rates, in common use, either in car load lots or less than carload lots. But this is by no means the fact.

The following commodities, most of which the average citizen never heard of, in carloads, are classified Class E in Western Classification :—

Dried beet pulp
Beet sugar refuse in tank cars

Brick
- Common
- Fire, (except stove lining) and fire clay
- Fire, for furnace lining
- Paving
- Porous
- Pressed and Ornamental Figured
- Shaped
- Silicate
- Tank blocks and flattening blocks

Brewers' refuse
Corn cobs
Starch refuse
Oxide, spent (refuse from Gas Purifying Plants)
Cinders
Underground conduits (for electric wires) stone, clay or cement
Tile, cement or clay posts
Fertilizer, N. O. S., including dried blood and canite
Acid phosphate fertilizer
Marl
Phosphate and phosphate rock, used for fertilizing purposes
Fuel wood in bulk
Glucose refuse and sorghum chips, N. O. S.
Gravel
Hoof stuffing in barrels
Ice
Foundry sweepings
Scale
Sawdust
Shavings
Woodbolts for staves, shingles or excelsior
Dredging machines loaded on trucks furnished by shipper, minimum weight, 60,000 pounds
Chatts (lead mining refuse)
Common clay
Fire clay
Slag
Zinc ore
Cracklings in bulk, (used as fertilizer)

Digestor tankage, blood meat meal and bloodflour in packages
Evaporated tank water
Packing house tankage
Asphalt, in tiling or blocks
Cement paving blocks
Seashell paving material
Stone or granite paving material
Stone, all kinds, crushed for road building or roofing
Vitrified brick curbing
Vitrified copings.
Sewer pipe, drain tile and cemetery tile
Cement well tubing
Grease traps (cement)
Roller scrap (printers' material)
Extension pile driver
Log loading machines
Portable steel rail saw
Portable steam shovel
Snow plow
Steam wrecking cranes
hauled in train or on trucks
furnished by shipper
} Minimum weight 60,000 pounds
Locomotives and tenders, standard gauge, on their own wheels and narrow gauge on standard gauge trucks, minimum wt. 60,000 pounds
Sand, including moulding sand, and sand and sawdust mixed.
Oyster and clam shells, ground or crushed
Sod
Marble, granite, gypsum, onyx blocks
Broken marble
Stone, N. O. S., including artificial stone, rough or dressed
Tile; building, hollow, fire proofing, gypsum building tile, cement building blocks, fire clay flue lining, and fire clay chimney pipe (exclusive of chimney tops)
Fire Clay, unglazed, and fire clay tile for lining cupolas.
Fire tile (for lining fire places and chimneys) in boxes or barrels,
Tobacco dust or powder, value not exceeding $25.00 per ton
Wood for pulp
Zinc sweepings

Spent canning liquor
Nitre cake

An inspection of this list applied to our common knowledge of the business of Minnesota and the adjacent territory is convincing that very little traffic is carried on the Class E rate, either in Minnesota or any of the adjoining states.

There are, however, commodities, few in number, but carrying a large amount of tonnage, consisting of the great staples of production and consumption, which it has always been the policy of the railways to carry at the lowest possible rate consistent with the actual cost of their transportation, and, at many times, the fierce competition which has existed between the various roads in the territory between St. Paul-Minneapolis and Chicago, the rates have been forced down below a fair compensation. All of these commodities move in carload lots, and are of such a nature that it is possible, in the majority of cases, to load the cars to their maximum capacity, which reduces the actual cost of transportation to a minimum. They are carried at less than the Class E rate, and the following is a list of such articles and the rates which have been collected during the year 1905 for transporting them between St. Paul-Minneapolis and Chicago, a distance of 400 miles by the short line:

	Northbound cents	Southbound cents
Flour to (Chicago proper)	..	10
Flour to points beyond Chicago a proportion averaging about	..	8
Lumber and Shingles	..	10
Wheat	..	10
Corn, Oats, Rye, Barley and Flax Seed	..	7½
Screenings	..	7½
Malt	..	10
Soft Coal	7	..
Hard Coal	10	..
Salt, in sacks	11	..
Salt, in bulk	10	..

The average of the southbound rates is 9 cents per cwt.

Now, my first proposition is that these commodities, in which all of the people—the farmers, the merchants and the laborers of all classes—are directly interested, and which are the foundation of the prosperity of the whole country, should be carried at the lowest possible rate, and at a lower rate than the occasionally transported commodities named in Class E, or any of the commodities covered by the Commissioners' proposed schedule, in which only the mercantile classes are directly interested.

I say that only the mercantile classes are interested in the class rates, because a reduction of one or two cents per hundredweight would amount to a reduction of only five or six cents on the average shipment, a reduction so small that the merchants would simply pocket it and not distribute it to their customers by a reduction in the price of their goods.

I am not here to defend the reasonableness of the proportional rate of 8 cents on flour, or the 7½ cent rate on corn, oats, rye, barley, flax seed and screenings, because I know, and every man in the railway business knows, that such rates on such commodities between Minneapolis and Chicago are not fairly remunerative rates; but are forced by competition between the lake and rail routes. They are the lowest rates in the whole vast territory between Chicago and the Pacific Coast, and all the people of Minnesota get the benefit. I submit, that because the people of Minnesota get the benefit of these rates forced by water competition, is no reason why the Commission should inflict a penalty by reducing the class rates which are already too low.

What I do claim, and the evidence in this case which I will consider later sustains my claim, is that 10 cents per cwt. upon the great staples of production and consumption is the lowest possible rate at which they should be carried from Minneapolis to Chicago, and even this rate does not make the great staples of production and consumption bear their full proportion of the cost of operating railways.

Now, these great staples of production and consumption come to the railways at Minneapolis and Chicago and are made up into trainloads and transported from one terminal to the other, a distance of 400 miles, on through train without breaking bulk of the train by collecting or distributing at intermediate stations. As they are carried no part of the distance on way-freight-trains, the additional cost of hauling way-freight-trains need not be considered, and the rate, therefore, should be made up by adding to the two terminal expenses a constant quantity for the straightaway haul for the whole distance.

Now, considering the fair terminal charges to be 2 cents per cwt., the rate of 10 cents per cwt. would leave 8 cents per cwt., or $1.60 per ton, for the straightaway haul of 400 miles, which would be exactly the 4 mills per ton per mile which the proposed schedule of the Minnesota Commission allows for the straightaway haul on the Class E rate. Everybody admits that the Class E rates should be higher than these commodity rates. These facts are conclusive that the class rates proposed by the commission are not high enough to be in line with the low commodity rates.

Hence, the 4 mills per ton per mile which the proposed Commissioners' schedule allows for the straightaway haul on through trains for Class E commodities is not enough. The rate per ton per mile for the straightaway through haul on Class E commodities should bear the same relation to the rate per ton per mile, 4 mills, for the straightaway haul which the great staples of production and consumption pay, as the whole rate, 13 cents per cwt. on the Class E bears to the whole rate, 10 cents per cwt. on these staples, which would be 5.2 mills per ton per mile on Class E rate, which is equal to 2.6 cents per cwt. per one hundred miles.

If, however, the Commission should think it fair to compare with the average rate of 9 cents per cwt., then the constant quantity which should be added for the straightaway through haul would be 4.55 mills per ton per mile on Class E rates, which is equal to 2.275 cents per cwt. per 100 miles.

As these are the lowest through rates in the vast territory west of Chicago, it seems to be beyond controversy that nothing less than these figures should be used as a basis in establishing a fair and reasonable schedule of rates for the straightaway haul on through trains of Class E.

Now, in order to show that I am concealing nothing in respect to the low commodity rates which the Commissioners should know, the following is a list of the other commodities besides the great staples of production and consumption which are carried on commodity rates less than the Class E rate between St. Paul-Minneapolis and Chicago, and the rates at which they are carried:

	North Bound	South Bound
	cents	cents
Iron Pipe	12½	..
Starch	12½	....
Tar	12½	12½
Iron and Steel articles	12½	....
Paper and Strawboard, also Strawboard boxes and cartons	12½	....
Cereal Products, uncooked	12½	....
Lime, Wall Paper, Stucco, Etc.	12½	....
Carbonic Acid, metal drums	12½	12½
Bullion, Etc.	....	12½
Flax Straw	11¼	....
Scrap Paper	12	....
Hardwood Lumber	12	....
Glass Bottles	12	....
Broken Glass	....	12
Ice	....	10
Rags	10	....
Sand	10	10
Sewer Pipe, Drain Tile, Etc.	10	....
Wild Mustard and Millet Seed	....	10
Stone	10	10
Building Stone	10	10

	North Bound	South Bound
Glue Stock	....	10
Building and Roofing Paper, Pitch, Tar and Roofing Coating	10	....
Grain Screenings	10	....
Masquite	....	10
Bones	....	10
Brick	10	10
Linseed Oil	....	10
Oilcake and Oilmeal	....	10
Bullion, when coming from Montana	....	10
Dried Sheep Manure	....	8
Rough Stone	8	....
Coke	8	....
Cement, Roofing Pitch and Roofing Tar	8	....
Peat	....	7
Burlap Bagging, imported	6	....
Passenger Equipment on own wheels	$40.20 per car	$40.20 per car
Freight Equipment	10.20 per car	10.20 per car
Rails	1.40 gr. ton	1.40 gr. ton
Scrap Iron, etc.	1.40 gr. ton	1.40 gr. ton
Locomotives on own wheels	8	8
Railroad Chairs, Nuts, Locks, Spikes, etc.	7	7

Let us next consider the relative cost of the straightaway haul on way-freight-trains, compared with through-trains, and the usual distance which local business is hauled on way-freight-trains on long lines of railways which carry through traffic.

I have already illustrated, on page 5, the method of hauling local freight on railways which have sufficient traffic to require through train service. The illustration shows, in a general way, how local freight is, or should be, hauled on

lines having through traffic, because it will result in some economy, but principally because it gives better despatch to the local freight which is carried long distances.

The illustration shows that all local freight originating at terminal stations and distributed to local stations, and all local freight picked up at local stations and delivered at terminal stations, must be hauled some part of the way on way-freight-trains at an additional expense. But on lines carrying through traffic, such traffic is not necessarily carried more than 100 miles on a way-freight-train.

But, on the other hand, local traffic which is picked up on one division of the way-freight run and destined to stations on another division of the way-freight run, is necessarily carried on at least two way-freight-trains, and on all branch lines such local freight is necessarily carried the whole distance on way-freight-trains.

There is another fact which bears upon this problem. Let me take a concrete example for illustration:

On the first day of June, 1905, there was loaded on the Chicago Great Western Railway at Minneapolis one car of less-than-car-load lots, destined to stations on the branch line between Randolph and Mankato, as follows:—

1,000 lbs.	to Northfield, ...	53 miles,
410 lbs.	to Dundas, ...	56 miles,
1,480 lbs.	to Faribault, ...	67 miles,
305 lbs.	to Warsaw, ...	72 miles,
2,575 lbs.	to Morristown, ...	77 miles,
1,310 lbs.	to Waterville, ...	83 miles,
300 lbs.	to Elysian, ...	89 miles,
2,740 lbs.	to Madison Lake, ...	96 miles,
1,490 lbs.	to Mankato, ...	111 miles.

This is a fair illustration of the way all less-than-car-load lots are loaded.

Now, as the car had to be hauled through to Mankato, it is perfectly evident that on the basis of cost of carriage the rate

on the 1,000 lbs. which was unloaded at Northfield, 53 miles from Minneapolis, should be the same as if that 1,000 lbs. had been carried the whole distance to Mankato, 111 miles from Minneapolis.

But, as a matter of fact, the Commissioners' schedule, and all other schedules, permit of collecting little more than one-half the rate per cwt. on the Northfield shipments that would be collectable if carried through to Mankato.

This evident fact should have due consideration in determining the constant quantity to be added to the straightaway haul on way-freight-trains.

The Minnesota Commissioners' proposed schedule inadequately recognizes these principles by making the constant quantity to be added for the straightaway haul on way-freight-trains for two hundred miles, two times the constant quantity added for the straightaway haul on through-trains.

It is my contention that the ratio should be much larger than 2 to 1, as I will now endeavor to show by the facts which are in evidence in this case.

The evidence shows that during the first twelve days of June, and the first twelve days of October, the Chicago Great Western Company hauled out of St. Paul and Minneapolis 306 cars of classified local freight, carrying an average load per car of 7,393 lbs., which for convenience we will call, ... 7,400 lbs.,
Estimating the weight of each car at,..... 30,000 lbs.

The total, or gross weight, per car hauled was, 37,400 lbs.

The local pay-load was therefore 20 per cent. of the total gross weight hauled.

During the first twelve days of October, it hauled out of Minneapolis 405 cars of through freight, carrying an average pay-load per car of,..... 50,960 lbs.
Estimating the weight of each car at,..... 30,000 lbs.,

The total gross weight per car hauled was,.... 80,960 lbs.

The through pay-load was therefore 63 per cent. of the total gross weight hauled.

The evidence shows that during October, 1905, the Great Western Company carried over the division Minneapolis to Oelwein, on its through trains, 469,014, 100-gross-ton-miles (including weight of both car and load) at a cost in wages and coal of $24,417.71. Therefore, 63 per cent. being pay-load, 295,478, 100-ton-miles, was pay-load carried at a cost in wages and coal of $24,417.71, which is equal to 8.2 cents for one, 100-ton-miles, the cost of hauling on through-freight-trains.

During the same time, and on the same division, it hauled 59,242 100-gross-ton-miles, on way-freight-trains, at a cost of $6,235.53. As 20 per cent. of the gross weight was pay-freight, it follows that it hauled only 11,828 100-ton-miles of pay-load, at a total cost of $6,235,53, equal to 52.78 cents per one, 100-ton-miles, which was the cost in wages and coal of hauling local classified freight on way-freight-trains; against 8.2 cents on through trains, or about 6½ times as much.

Now, as to the number of cars:

It is evident the average load of through cars being 50,960, and the average load of local classified freight being 7,400 lbs., it requires nearly seven times as many cars to load any given quantity of local classified freight as to load the same quantity of through freight.

Next, as to the length of time each car is in use:

One day's time will be consumed in loading a local freight car, and if loaded for a station on the first division of our illustrated way-freight-line, it will be unloaded the next day, mak-

ing two days use for 100 miles run. If destined for more distant way-freight divisions, correspondingly longer.

Through freight requires the same one day to load, two nights and one day—that is to say 1½ days—to make the 400 miles run, and one day to unload: total 3½ days for 400 miles, equal to .87 of a day for 100 miles.

Therefore, under the most favorable conditions for each class of service, it takes seven times as many cars, two and one-half times as long, or the equivalent of 17 cars in the local service to one in the through service. In actual practice, the ratio is about 20 to 1.

The fact is that the expenses of transportation are all by the car load or the train load or the gross tonnage, including the weight of the pay-load plus the weight of the car which it is necessary to haul in order to carry the pay-load.

With the necessarily light loaded cars and light loaded train of the way-freight, the expense per hundredweight of carrying pay-freight on such way-freight trains is enormously increased over the expense per hundredweight of carrying the through-freight in the heavily loaded cars in the heavily loaded through-freight-train.

So important is the heavily loaded car and the heavily loaded train to the economy of transportation that within a few years all the railways in the country have expended millions upon millions in the purchase of larger cars, heavy locomotives, and in reducing their grades, strengthening their rails, bridges and roadway, so as to be able to use them. By these expenditures they have decreased the expenses of the through service, but not to any appreciable extent, the expense of the local way-freight-service, because the local traffic is so small.

Based upon the relative costs, it is beyond dispute that the constant quantity which should be added to the terminal for the way-freight haul should be more than seven times the constant quantity added for the through-freight haul. The evidence produced by the other companies is corroborative.

These facts and conditions are not new to me, or to any other railway official who has studied the details of his business. The fact is that no schedule of rates has ever been made which gives fair compensation for transporting less-than-car-load lots short distances. I have often made the statement that the most difficult business to manage so as to get a new dollar for each dollar of out-of-pocket expense, is the transporting of less-than-car-load lots for short distances, or even for long distances, for that matter.

It would be such an innovation upon long established precedents to make the constant quantity added for the way-freight haul seven times the reasonable constant quantity added for the straightaway through haul, that, although I think it would be justified by the relative costs of the service, I am not disposed to ask the commission to adopt this ratio.

But I do think it would be fair and reasonable to ask the Commission to adopt the ratio of 3 to 1, limited to a distance of one hundred miles, as the constant quantity to be added to the terminal expenses for the straightaway haul on way-freight-trains, as compared with the constant quantity to be added for the straightaway haul on through trains. This ratio would be fairly in line with many of the tariffs which are now in existence.

The third and last factor of the schedule is:

"A reasonable percentage relation between the rates of the different classes."

The Commissioners' proposed schedule uses the first class rate as the basing rate and expresses the relation between the various classes by regarding the first class 100, the second 83 1-3, the third 66 2-3, the fourth 50, the fifth 40, Class A 45, Class B 35, Class C 30, Class D 25, Class E 20.

The true relation between the classes rests upon the same general line of facts which we have been considering, viz: the relation between the weight of the pay-load and the weight of the car in which the pay-load is hauled.

A critical analysis of the proper relation between the rates

would involve the examination of a class of statistics which do not at present exist in the office of any railway company. To collect all of the different articles and determine by measurement and weight such proper relation, would be an expense of perhaps, hundreds of thousands of dollars, and perhaps, years of time.

But as the relation expressed by the Commissioners' schedule is substantially the relation which exists in all the schedules in evidence, and has existed for a great many years, I am willing to admit, for the purpose of this case, that the relation which the Commissioners have adopted is correct.

MARSHALLING THE CONCLUSIONS.

I have now completed my analysis of the evidence bearing upon the three factors of a reasonable schedule of rates, and will now marshall my conclusions:

(1) That the reasonable terminal charge for the first class rate is 16½ cents per cwt;

(2) That the reasonable constant quantity to be added for the straightaway haul on the way-freight-train, (the distance being limited to one hundred miles) for first class freight, is 34.125 cents per cwt. per one hundred miles; and that the reasonable constant quantity to be added for the straightaway haul on through trains beyond the 100 miles way-freight-train haul, is 11.375 cents per cwt. per 100 miles.

(3) That the reasonable percentage relation between the rates of the different classes is the relation fixed in the Commissioners' proposed schedule; first class being 100, second class 83 1-3, third class 66 2-3, fourth class 50, fifth class 40, Class A 45, Class B 35, Class C 30, Class D 25, Class E 20.

From this data, I have prepared a diagram of the reasonable rates of all the classes for a distance of 400 miles, (Diagram No. 7) to which I now call attention.

Diagram No. 8 shows a comparison between the First Class and the Class E rates of my proposed schedule and the same rates of schedule propsed by the Minnesota Commissioners.

This diagram shows that my proposed rates are higher than the Commissioners' proposed rates.

Diagram No. 9 shows a comparison between my proposed First Class and Class E rates and the same rates as made by the Freight Agents in Minnesota both South of St. Paul and North of St. Paul.

This diagram shows that my proposed rates are higher rates than are named in the Freight Agents' schedule South of St. Paul and taken as a whole about the same as the rates North of St. Paul.

PART SECOND.

I now propose to show, by an entirely separate and independent line of Chicago Great Western statistics, that the rates proposed by the schedule which Ihave prepared are reasonable and just rates.

Before producing these statistics, it is necessary to explain that the Chicago Great Western Railway System consists of three independent coroprations: the Chicago Great Western Railway Company, the Wisconsin, Minnesota & Pacific Railroad Company, and the Mason City & Fort Dodge Railroad Company. The accounts of these companies are kept entirely separate.

The Chicago Great Western Company owns a line from Minneapolis to Chicago, and from Kansas City to Chicago. The whole number of miles owned and operated by the Chicago Great Western Company is 818 miles. The statistics which I am about to produce pertain entirely to the Chicago Great Western Company.

The Chicago Great Western Railway is all main line. The greater part of its traffic is interstate traffic, in the territory of the keenest competition, and, therefore, lowest rates between Chicago and the Pacific Coast.

It is impossible to say what proportion of its business is state business, but much the larger part of its state business is in Iowa, in which state nearly one-half of its mileage is located.

Its total freight earnings in 1905 amounted to $5,096,-543.14, and the total freight earnings from Iowa state business was, in round numbers, $200,000, or 3.9 per cent of the whole, mostly unclassified business, principally coal. We have no statistics as to the state business of the other states, but as Iowa covers half the mileage, it is fair to estimate the entire state business of all the states at 10 per cent., and the interstate business at 90 per cent.

All its classified freight business, both state and interstate, was carried at the various state and interstate scheduled rates as they existed in 1905, without discount, drawback or rebate of any kind.

Its unclassified and commodity freight business was carried on the rates which I have before named.

In order that the Commission may know how the classified schedule of interstate rates compares with the classified schedule of state rates in Minnesota which existed in 1905, and with the classified schedule of rates proposed by the Commission, and the classified schedule of rates hereinbefore proposed by myself, I have prepared diagrams Nos. 10 to 19, inclusive.

Diagram No. 10 presents a comparison of these various schedules as to first class rates; diagram No. 11 the same comparison as to second class rates; and the other diagrams make the same comparisons as to all other classified rates.

An inspection of these diagrams shows conclusively that the classified schedules, both state and interstate, on which the traffic of the Chicago Great Western road was actually carried in 1905, were materially higher than the rates proposed by the Commission, and materially less than the rates of the schedule which has been prepared by myself. I should estimate that the schedules on which the business of 1905 was actually carried was about half way between the rates proposed by the Commission and the rates proposed by myself.

We have taken the waybills of every Minnesota state shipment bearing the classified rates on the Chicago Great Western road during the month of June, and find that if the rates proposed by the Minnesota Commission had been applied to these shipments the revenue on these shipments would have been decreased 22.1 per cent., and if the Iowa rates had been applied to such shipments the revenue derived from such shipments would have been reduced 28.8 per cent. It would appear from this, that practically, the Iowa Commissioners' class rates are about 6.7 per cent. lower than the propsed rates of the Minnesota Commission.

These percentages seem large, but the traffic is so small that when applied to the classified state business alone the aggregate

reduction is comparatively small. In Minnesota the aggregate revenue was only $21,000 for the whole year and the aggregate reduction for June was only $387.28, equal to about $5,000 per annum.

I have no statistics of the unclassified business of Iowa, but if we estimate the unclassified business of Iowa at four times the unclassified business in Minnesota, it would amount to $84,000, and as the Iowa rates are 29 per cent. less than the Minnesota Freight Agents' schedule in Southern Minnesota, it follows that the company's revenues for the year would have been increased about $34,000 by applying the Minnesota rates which prevailed in 1905 to its Iowa classified traffic.

Hence, these 22 and 29 per cents., if applied to the Chicago Great Western's classified state business only, would not materially effect the statistics which I am about to present.

But if the present commodity and interstate rates are in line with the classified rates, as I claim and expect to prove that they are, and if the rates of the Commissioners' proposed schedule are reasonable rates, then, logically, the commodity and interstate rates must be reduced the same percentage to bring them within line. That is to say: if the class rates are reduced 22 per cent. the commodity and interstate rates must be reduced 22 per cent., and if a reduction of 22 per cent. should be made upon the entire freight earnings of the Chicago Great Western road, the effect would be appalling.

And if the rates of the Commissioners' proposed schedule be put into effect on the other roads represented at this hearing, and all their commodity and interstate rates be reduced to bring them in line, the effect upon all the roads would be equally appalling.

Now, I want to call attention to the fact that the six years (1900 to 1905 inclusive) have been prosperous years, and especially for the great railways north of St. Paul. The volume of traffic has been large. As reasonable rates must have

relation to the volume of the traffic carried, it should be borne in mind that these prosperous years—if history shall repeat itself—will be followed by less prosperous years. Since the world began, seven fat years have been followed by seven lean years.

The statistics which I shall present relate to the six fat years, 1900 to 1905, inclusive.

The following table shows the net earnings, the amount required to pay fixed charges and five per cent. dividend on the Preferred A Stock, and the surpluses and deficits for each year, 1900 to 1905, inclusive:

Fiscal Year	Net Earnings	Required for Fixed Charges and to Pay 5% on Pfd. Stock A.	Surpluses and Deficits
1900	$2,230,814.05	$2,085,255.45	$145,558.60
1901	2,182,346.21	2,189,678.93	Def. 7,332.72
1902	2,264,998.39	2,242,197.94	22,800.45
1903	2,388,561.07	2,369,164.92	19,396.15
1904	2,118,616.67	2,542,799.34	Def. 424,182.67
1905	2,254,618.02	2,630,063.30	Def. 375,445.28
	$13,439,954.41	$14,059,159.88	Def. $619,205.47
Aver. per year.	2,239,992.40	2,343,193.31	Def. 103,200.91

It will be noticed that the aggregate net earnings for the six fat years have been insufficient to pay the fixed charges and five per cent. upon the Preferred Stock A, by $619,205.47.

The Chicago Great Western Railway Company has outstanding, pertaining to its 818 miles of railway, $7,468,090 of Preferred Stock B, and $21,315,445 of Common Stock, and has never paid or earned a dividend on either.

I built the Chicago Great Western Railway. I superintended the expenditure of every dollar it cost in first construction, and every dollar which has been expended on it for improvements and for rolling stock. It was built with cash in hand,

and its improvements have been made with cash in hand, and its rolling stock has been purchased with cash in hand, and I know that every dollar which has been expended has produced a dollar's worth.

And while I cannot state off-hand, the exact number of dollars which have been expended in producing the property, I know that its net earnings during the last six years have not been sufficient to pay five per cent. upon the actual cash cost of the property, by nearly, or quite, $2,000,000.

It is my contention that the indisputable fact that the Chicago Great Western Railway, carrying freight at the Freight Agents' rates for six successive fat years, did not earn sufficient to pay its operating expenses and 5 per cent. interest on its actual cash cost, is conclusive evidence that the Freight Agents' rates (which are higher than the Commissioners' proposed rates, but lower than my proposed rates, say, about half way between the two proposed rates) were too low to be reasonable:

Unless, The lines of the Chicago Great Western are so located that the railway cannot, and does not, obtain a sufficient volume of traffic to entitle it, at reasonable rates, to earn such expenses and interest; or,

Unless, The lines are not constructed in a manner and at a cost to entitle it, at reasonable rates, to earn such expenses and interest; or,

Unless, The operating expenses, by reason of unskillful management, are too high.

I propose to examine each item separately and compare the statistics of the Great Western with the statistics of two of its competitors in the territory south of St. Paul, viz: the Omaha and the St. Paul Roads, and with two roads north of St. Paul, viz: the Northern Pacific and the Soo Lines.

I shall not use the statistics of the Great Northern because its enormous iron ore traffic in Minnesota, and its coal traffic

in the west, produce conditions which render its published statistics useless for the purpose of comparison with the statistics of lines which have no such specialized traffic.

The entire lines of none of the companies with which comparisons will be made consist, like the Great Western lines, of only main line, entirely located in the territory of the fiercest competition, both in respect to the character of the service and the rapidity of movement, as well as in respect to rates. The northern lines have no competition, either in respect to rates or character of service.

Parts of the lines of the southern companies are located, and are operated, under the same competitive conditions as the Great Western lines, and other parts are located in non-competitive territory of higher rates and less exacting conditions in respect to the character of the service, rapidity of movement, etc.

My first proposition is that the lines of the Great Western Company are so located as to entitle them to command, and they do command, a sufficient volume of traffic, if it received reasonable rates, to earn expenses and 5 per cent. on their cash cost.

In support of this proposition, I cite the statistics of the volume of traffic per mile of road in the year 1905 of the various roads which I have named:

The number of ton miles of freight carried per mile of road; in 1905:

Chicago Great Western,	885,028
Omaha,	520,459
St. Paul,	590,826
Northern Pacific,	820,256
Soo Line,	497,455

The number of passenger miles per mile of road in 1905:

Chicago Great Western,	100,607
Omaha,	78,646
St. Paul,	65,357
Northern Pacific,	91,914
Soo Line,	44,464

In addition, I will state that the volume of traffic on the Chicago Great Western lines is now so large that the company has been compelled to provide for a double track between Oelwein and Chicago, and is already at work on its construction.

My second proposition is that the Chicago Great Western lines are constructed in a manner, and at a cost, to entitle them, if they receive reasonable rates, to earn expenses and five per cent. on actual cash cost.

As to cost: I have already said they were built with cash in hand, and as cheaply as such lines can be built, and at a less cost than they could now be built, at the present price of labor and material.

In respect to character for economical operation: Taken as a whole, the grades are as low, its roadbed, bridges and track in as good condition as any of its competitors. It has as fine shops, roundhouses, water stations, and as large a proportion of sidings, as good locomotives, cars and equipment of every kind as any of its competitors.

And it can, and does, carry traffic as cheaply as any of its competitors, and as cheaply as any of the lines north of St. Paul.

My third proposition is that its operating expenses are not made too high by reason of unskillful management.

In support of this proposition, I will say that the heads of the various operating departments are men of recognized capacity, and that they give their whole time with great industry to the business of the road. They give most conscientious attention to every detail. I also cite the following statistics:

The percentage of cars hauled empty in 1905:

Great Western, ...28.17 per cent.,
Omaha, ...27.35 per cent.,
St. Paul, ...30.03 per cent.,
Northern Pacific, ...29.27 per cent.,
Soo Line, ...24.22 per cent.

The average pay-load per loaded car in 1905:

Great Western,	14.36 tons,
Omaha,	15.13 tons,
St. Paul,	13.73 tons,
Northern Pacific,	16.10 tons,
Soo Line,	15.44 tons,

Pay-load averaged on both empty and loaded cars in 1905:

Great Western,	10.27 tons,
Omaha,	10.99 tons,
St. Paul,	9.61 tons,
Northern Pacific,	11.38 tons,
Soo Line,	11.70 tons.

Average pay-load to each freight-train-mile in 1905:

Great Western,	296.01 tons,
Omaha,	234.48 tons,
St. Paul,	296.09 tons,
Northern Pacific,	366.52 tons,
Soo Line,	308.55 tons.

It will be noticed that in all these statistics, which are regarded as tests of skillful management, the Great Western Company compares favorably with its competitors south of St. Paul.

The superiority of the lines north of St. Paul is due to different character of the commodities transported, and the slower speed at which their non-competitive territory permits them to be carried.

In the territory occupied by the Chicago Great Western, the farmers have long since ceased to ship grain, while the farmers in the northern territory still ship their grain.

When farmers, instead of shipping grain, convert it into cattle and hogs, the volume of their traffic is immensely decreased, and the loading of their cars is immensely decreased.

The cattle and hogs of the southern territory cannot be loaded as heavily as grain, and they must be run to market at a high rate of speed, while grain of the northern territory may be carried at a slower speed. Speed is expensive. It materially reduces the train load. An engine which will haul 1,200 tons at twelve miles per hour, will haul only about 900

tons at eighteen miles per hour. I was once crossing the Atlantic in a steamship which was making fourteen knots per hour. Six hundred miles from Liverpool it found a disabled steamship of practically the same size and load, which it towed into Liverpool. The addition of this double load only reduced the speed two knots per hour. Such is the enormous cost of speed. The difference in speed is more than the difference between the weights of trains hauled in the northern and the southern territory.

This difference in speed between the northern and southern territory will more than account for the difference in the percentage of expenses to earnings of the various lines, which is so noticeable and so much talked of.

Percentage of expenses and taxes to earnings in 1905:

Great Western,	72.36 percent.,
Omaha,	64.37 percent.,
St. Paul,	64.74 percent.,
Northern Pacific,	56.01 percent.,
Soo Line,	56.43 percent.

I have already stated the reason for the smaller percentage of expenses to earnings which exists between the northern and southern lines.

The much larger percentage of expenses to earnings on the Chicago Great Western lines than on the two other lines in the southern territory, is due in part to the fact that practically all of the traffic of the Great Western lines requires to be carried at the accelerated speed, while that part of the traffic of other southern lines which is non-competitive need not be carried at the accelerated speed.

The larger percentage of the Chicago Great Western may be fully explained by the lower average rates it receives.

The average rate per ton per mile, and the average distance hauled, in 1905:

	Average rate	Average haul
Great Western,	.7 cents,	257.13 miles,
Omaha,	.93 cents,	155.94 miles,
St. Paul,	.882 cents.	175.14 miles.

The distance hauled must always be considered in comparing the average rate per ton per mile, because the construction of all schedules gives larger rates per ton per mile for shorter than longer distances. Therefore, it would not be fair to compare the .7 cent rate of the Great Western, with an average haul of 257 miles, with the .93 cent rate, with an average haul of only 155 miles, of the Omaha, or with the .882 cent rate, and average haul of 175 miles, of the St. Paul.

The equivalent rates, using the schedule plan proposed by the Commission, would be:

Great Western, ...	.7 cents,
Omaha, ...	.85 cents,
St. Paul, ...	.82 cents.

These differences seem small. The difference between the Chicago Great Western and the Omaha's equivalent average rate is only 1.5 mills per ton per mile. But the addition of 1.5 mills per ton mile to the traffic of the Great Western line in 1905 would have increased its earnings $1,086,409, and reduced its percentage of expenses and taxes to earnings to 63.08 per cent., against the Omaha's 64.37 per cent.

The difference between the Chicago Great Western and the St. Paul's equivalent average rate is only 1.2 mills per ton mile, but the addition of 1.2 mills per ton mile to the traffic of the Chicago Great Western line in 1905 would have increased its earnings $869,127.60, and reduced its percentage of expenses and taxes to earnings to 64.74 per cent., against the St. Paul's 64.74 per cent.

Thus, it will be seen that in respect to percentage of expenses and taxes to earnings, the difference in the rates alone places the Chicago Great Western quite on a parity with its competitors.

The question will be asked: If the Omaha gets the equivalent of .85 cents per ton per mile, and the St. Paul gets the equivalent of .82 cents per ton per mile, why does not the Great Western obtain equally large rates?

The answer is that all the competitive business is carried by the three roads on exactly the same schedule of rates, but practically all of the Great Western traffic is competitive, while only a part of the traffic of the other two lines is competitive. On their non-competitive business the other lines get higher rates, which is the reason of their higher average rates.

There is still another matter to be considered. It is the general impression that the commodity rates of the Interstate schedules are much lower than the local and state rates, and are therefore out of line with the local and state rates.

The usual form of expression is that the railways carry the through business at such low rates that they are compelled to collect unreasonably high rates on the classified and the local and state traffic.

If this statement is true, the railways may answer, that all the people,—the farmers, the laboring men of all classes, the people who live in the country and the people who live in the cities, alike—get the benefit of it, because the great staples of production and consumption which are carried at these low rates are the basis of their common prosperity.

It has been my contention through my whole argument that these through rates are too low, but I have also endeavored to show that the local and state rates are also too low.

I will now produce facts to prove that the through rates are fairly in line, on the basis of cost of carriage, with the local and state rates.

I have already explained that the basis of the difference in rates is the differing relation between the weight of the payload and the weight of the non-paying car.

It is well known that in the through commodity traffic the cars are much more heavily loaded than in the classified and local traffic.

It is not necessary to again enter upon the tedious analysis of the result of these different loadings. Therefore, I am going to content myself at this time with stating one pertinent fact.

The Chicago Great Western Company carried between its terminals: that is to say, between St. Paul-Minneapolis and Chicago; Kansas City-St. Joseph and Chicago; Kansas City-St. Joseph and St. Paul-Minneapolis, a total tonnage of 380,-459,250 ton miles of freight, on which it collected an average rate of .67 cents per ton per mile, while its average rate on its entire business, long haul and short haul, was only .7 cents per ton mile.

This pregnant fact proves conclusively that the through commodity rates are more than high enough to be in line with the classified and local and state rates.

It is my conclusion that the facts I have stated prove conclusively that the rates, both interstate and state, through and local, in the territory occupied by the Chicago Great Western lines, are too low to be reasonable, because they will not produce revenue enough to pay operating expenses and interest at the rate of 5 per cent. on the actual cash cost of the Chicago Great Western lines, or any other lines which have been built or can be built in the same territory.

The facts show that in order to pay operating expenses and 5 per cent. interest on the actual cash cost of such a line, or any line located in the territory occupied by the Chicago Great Western, such lines should be permitted to earn an average rate per ton of .8 of a cent, instead of .7 of a cent, and, therefore, the rates should be raised an average of .1 of a cent per ton mile, equal to 14 per cent., which would bring all the rates, interstate and state, through and local, to the rates in the schedule proposed by myself, and represented by Diagram No. 7.

I claim that these conclusions are amply proven by two separate and independent lines of statistical facts.

CHICAGO GREAT WESTERN RAILWAY CO.

Statistical Tables

used by Mr. Stickney in his argument.

CHICAGO GREAT WESTERN RAILWAY COMPANY.

Statement of Terminal Expenses at St. Paul-Minneapolis, considered as one terminal, for the Month of October, 1905, Made by General Manager, checked by Auditor.

During October, 1905, Wages of Engineers and Firemen, Conductors and Brakemen on Chicago Great Western switch and transfer engines at St. Paul and Minneapolis, were		$8,284.00
This is 31 per cent of the wages paid all engineers and firemen, conductors and brakemen, on the Northwest Division.		
It is fair to assume, therefore, that this proportion, (31%) of the following expenses on the Northwest Division, may be charged against the terminals:		
Train supplies	$1,176.00	
Loss and Damage to Freight and Baggage	1,171.00	
Injuries to Persons	1,603.00	
Wrecking	277.00	
Superintendence	933.00	
	$5,160.00	
31% of which is		1,600.00
Coal consumed by switch engines at St. Paul and Minneapolis, 2,188 tons at $3.00 per ton		6,564.00
2,188 tons is 19% cent of the coal consumed by all engines on the Northwest Division.		
It is fair to consider the same proportion (19%) of the following expenses, as properly chargeable to the terminal cost:		
Water supply	$754.00	
Maintenance of Locomotives	13,416.00	
Maintenance of cars	15,588.00	
Interest on Equipment and Shops	7,250.00	
	$37,008.00	
19% of which is		7,031.00
The following are the actual Terminal Expenses:		
Flagmen and Watchmen	$1,163.00	
Station supplies	356.00	
Operating Telegraph	345.00	
Station Service	6,355.00	
Expenses Stockyards and Elevators	2,005.00	
Switching charges paid	2,384.00	12,608.00
Carried Forward		$36,087.00

Brought Forward		$36,087.00
Maintenance of way		2,555.00
Rentals paid Minneapolis & St. Louis, Great Northern and Northern Pacific Companies	$3,870.00	
Rentals paid Minnesota Transfer	500.00	
Rentals paid Union Depot Company	77.00	4,447.00
		$43,089.00
Add one month's interest at 5% per annum on value of Chicago Great Western terminal property		4,833.00
		$47,922.00

Number of passenger and loaded freight cars, in and out, including cars from the north to South St. Paul, and South St. Paul to the north	15,610
Cost per car is, therefore	$3.08
To this should be added the following:	
Assuming the average detention of a car at terminals to be five days, at the regular per diem rate would be	1.00
	$4.08

The following expenses have been found to be 10.8% of the foregoing expenses:

Traffic Agencies on Line	1.4%	
Snow shovelling and Fencing	.1%	
General Expenses	6.3%	
Taxes	3.0%	
	10.8%	
10.8% of $4.08		.44
MAKING TOTAL COST PER CAR		$4.52

In rechecking, an error was found of 4 cents per car.

CHICAGO GREAT WESTERN RAILWAY COMPANY.

Statement showing Terminal Expenses at St. Paul-Minneapolis during calendar year 1905.—Number of loaded freight cars in and out, and cost per loaded freight car.
Made by the Auditor.

Repairs to Locomotives, Water, Hostling and Supplies for Locomotives		$22,146.00
Wages of Switchmen		37,611.00
Wages of Switch Engineers and Firemen		22,146.00
The amount paid engineers and firemen ($22,146.00) is 16% of the wages paid all engineers and firemen on the Northwest Division.		
It is fair, therefore, that this proportion (16%) of the following expenses on the Northwest Division, be charges against the terminals:		
Train supplies	$6,565.00	
Loss and Damage to Freight and Baggage	24,723.00	
Injuries to Persons	19,208.00	
Maintenance of Freight Cars	90,024.00	
Wrecking	1,764.00	
Superintendence	10,139.00	
Damage to Property and Stock	1,275.00	
	$153,698.00	
16% of which is		24,591.00
Coal consumed by switch engines, 17,592 tons at $3.00		52,776.00
The following are the actual terminal expenses account freight business:		
Station Service	$48,569.00	
Flagmen and Watchmen	1,775.00	
Operating Telegraph	1,523.00	
Expenses at South St. Paul	10,206.00	
Switching charges paid	28,562.00	
Drayage	701.00	
Traffic Agencies	8,340.00	99,676.00
Wages of Section force	$10,155.00	
Material for Maintenance	6,296.00	16,451.00
Carried Forward		$275,397.00

Brought Forward		$275,397.00
Rentals paid:		
Northern Pacific (freight proportion)	$26,883.00	
Minnesota Transfer	6,801.00	
Minneapolis & St. Louis	370.00	
Various	560.00	34,614.00
Paid to Northern Pacific for use of track, &c., (freight proportion)	$10,994.00	
Paid to Minnesota Transfer	20,626.00	
Paid to St. Paul Union Depot (freight prop'n)	5,872.00	37,492.00
Add interest at 5% to cost Chicago Great Western Terminal Property		57,996.00
		$405,499.00
Add 10% to cover General Expenses and Taxes		40,549.00
		$446,048.00
Number of loaded freight cars in and out, including cars from the north to South St. Paul, and South St. Paul to the north		109,706
Making the cost per car		$4.07
To which add 5 days per diem at 20 cents, this being the average detention of a freight car at terminals		1.00
MAKING TOTAL COST PER CAR		$5.07

CHICAGO GREAT WESTERN RAILWAY COMPANY.

Terminal Expenses Per Car at Chicago, Fiscal Year ending June 30, 1905.

Interest on Freight Yard and Freight Terminals owned by the Company, 16 miles of track at $20,000 per mile, making $320,000, at 5%		$16,000.00
Freight proportion of rental paid Chicago Terminal Co., Total rent $224,229.36,—Freight proportion 44.5%		99,782.06
Freight proportion of amounts paid Chicago Terminal Co. for maintenance and operation		36,402.43
Freight House Payrolls:		
Chicago Freight House	$27,663.00	
Chicago Warehouse	43,506.30	
Chicago Transfer	16,682.40	
Union Stock Yards	6,167.50	94,019.20
Chicago Yard wages		9,019.85
Switch Engineers and Firemen	$14,149.15	
Switchmen	26,375.75	
Fuel for Switch Engines at $2.00 per ton	18,631.00	
Repairs, Water, Hostling and Supplies for Locomotives	14,149.15	73,305.05
Wages of Section force, yard owned by Co	$6,432.90	
Material for Maintenance	3,988.40	10,421.30
		$338,949.89
Cash paid out to other lines for Switching, &c		104,157.41
		$443,107.30
Number of loaded cars in and out	83,493	
Average cost per car	$5.18	

CHICAGO GREAT WESTERN RAILWAY COMPANY.

Statement of all less-than-carload lots loaded at St. Paul during first 12 days of June.

Date.	Car No.	Initial.	Weight.	Revenues.
June 1	30133	G	655	4.20
" 1	14980	G	4,220	20.29
" 1	10908	KC	1,628	10.10
" 1	4220	MDT	10,787	35.01
" 1	30304	G	5,866	14.04
" 1	2726	GN	2,875	5.58
" 1	14168	G	5,153	65.30
" 1	11014	KC	5,482	14.10
" 1	1816	M&NW	6,795	11.12
" 2	9418	KC	14,656	31.17
" 2	954	M&NW	3,450	6.53
" 2	1222	G	1,987	9.91
" 2	700	G	6,095	8.58
" 2	4038	FRD	10,904	21.39
" 2	10122	KC	4,015	20.67
" 3	2306	G	5,275	17.41
" 3	16934	G	5,595	5.08
" 3	13314	G	6,394	12.86
" 3	10601	FGE	2,205	6.10
" 3	1780	G	3,081	17.51
" 3	13234	G	2,400	6.08
" 3	17474	G	7,285	18.18
" 3	17754	G	6,205	25.85
" 3	1798	G	3,415	23.90
" 5	24783	SFE	3,375	19.44
" 5	21721	FGE	7,831	42.88
" 5	30275	G	12,984	29.72
" 5	9502	MDT	4,160	9.47
" 5	10764	KC	8,341	20.76
" 5	13082	MDT	7,115	15.69
" 5	8922	KC	11,007	23.24
" 6	13224	G	100	.15
" 6	30347	G	1,510	9.33
" 6	8464	G	1,660	2.01
" 6	55261	IC	13,320	33.97
" 6	2475	SFRD	6,800	13.79
" 6	11480	KC	228	.50
" 6	8922	KC	435	1.83
" 6	12882	G	2,572	7.69
" 6	10236	G	2,325	6.03
" 6	30346	G	8,346	15.55
" 6	19529	CFX	2,059	8.35
" 6	2560	G	9.370	55.42
" 6	2541	SFRD	15,795	37.88
" 7	17194	G	10,894	39.70
" 7	16830	G	1,680	8.30
	46 cars		258,330	$12.66

Date.	Car No.	Initial.	Weight.	Revenues.
Forward.....	46 cars		258,330	812.66
" 7.....	16416	G	3,022	2.52
" 7.....	17762	G	19,744	51.52
" 7.....	16388	G	3,886	10.51
" 7.....	7290	G	1,770	7.17
" 7.....	2718	G	965	3.44
" 7.....	17610	G	8,682	21.55
" 7.....	60008	G	7,525	19.55
" 8.....	14498	G	9,457	49.65
" 8.....	119598	PRR	3,890	15.92
" 8.....	15758	G	6,000	33.00
" 8.....	16067	PRR	5,000	18.00
" 8.....	13958	MDT	5,600	22.40
" 8.....	10601	CFX	3,437	4.70
" 8.....	10384	KC	9,758	29.52
" 8.....	8916	G	2,400	6.94
" 8.....	13552	G	3,241	11.05
" 8.....	276	FR	5,145	12.49
" 8.....	11576	KC	8,716	20.67
" 9.....	8973	MDT	3,432	13.74
" 9.....	2569	SFRD	5,488	17.19
" 9.....	14155	FGE	1,090	6.85
" 9.....	35304	SR	8,140	4.88
" 9.....	8464	G	4,570	5.12
" 9.....	11240	G	8,228	22.24
" 9.....	42098	G	6,504	16.96
" 9.....	13058	G	2,135	9.75
" 9.....	13220	G	3,542	7.05
" 9.....	2734	G	10,287	20.75
" 9.....	13138	G	9,720	58.12
" 10.....	4038	FPD	78	.25
" 10.....	13566	MDT	6,140	30.70
" 10.....	15229	UL	7,800	36.76
" 10.....	16416	G	3,080	18.56
" 10.....	30259	G	3,520	3.81
" 10.....	16206	G	8,020	20.62
" 10.....	30248	G	2,208	4.93
" 10.....	30264	G	1,807	8.38
" 10.....	30241	G	1,311	3.24
" 10.....	33940	St L	6,755	15.28
" 12.....	30149	G	1,810	11.11
" 12.....	9512	G	10,012	15.12
" 12.....	268	G	6,357	17.82
" 12.....	30128	G	4,080	10.31
" 12.....	9356	KC	1,270	4.58
" 12.....	1214	KC	9,461	23.31
" 12.....	11576		30	.25
" 12.....	30136	G	3,978	15.91
	94 cars		510,916	1,688.60

CHICAGO GREAT WESTERN RAILWAY COMPANY.

Statement of all less-than-carload lots loaded at St. Paul during first 12 days of October.

Date.	Car No.	Initial.	Weight.	Revenues.
Oct. 2	2457	G	8,245	56.90
" 2	14470	G	6,020	14.80
" 2	105	LS	2,770	13.08
" 2	61056	LV	1,140	7.72
" 2	10244	G	780	1.00
" 2	15394	G	11,995	27.12
" 2	30198	G	4,300	9.53
" 2	30239	G	4,606	12.04
" 2	14213	NYDL	3,680	10.87
" 2	30245	G	3,876	11.23
" 2	13708	G	3,320	18.18
" 3	15124	G	2,840	13.76
" 3	840	G	5,980	28.13
" 3	171	SRL	2,830	3.46
" 3	30192	G	9,630	28.82
" 3	30113	G	13,660	28.21
" 3	8141	MDT	4,110	28.49
" 3	17068	G	5,350	18.84
" 3	16112	G	2,750	5.37
" 3	30020	GT	6,950	18.23
" 3	4036	DTD	18,180	36.65
" 4	8206	G	1,000	.50
" 4	14766	G	6,080	4.25
" 4	12202	G	180	.41
" 4	21982	Soo	2,550	9.52
" 4	22311	MP	8,880	36.72
" 4	10536	G	4,340	4.10
" 4	30348	G	13,090	38.31
" 4	2882	Soo	6,070	15.89
" 4	16239	NYC	4,370	10.97
" 4	75581	B&O	15,300	33.90
" 4	11864	MC	10,570	52.65
" 5	85120	GN	930	9.40
" 5	13810	GN	4,190	29.22
" 5	4780	NP	7,620	5.90
" 5	74350	GN	13,155	32.82
" 5	30219	G	3,460	8.91
" 5	36678	NP	3,360	8.85
" 5	18561	NP	7,960	27.95
" 5	19954	Soo	18,930	36.23
" 5	45851	NYC	9,490	48.69
" 6	18476	Soo	10,375	28.90
" 6	46088	G	3,350	22.66
" 6	17308	G	3,690	21.30
" 6	23749	Q	1,035	1.56
" 6	54108	Milw	4,475	9.05
	46 cars		287,462	891.09

Date.	Car No.	Initial.	Weight.	Revenues.
Forward.....	46 cars		287,462	891.09
Oct. 6.....	12992	G	1,150	3.22
" 6.....	26677	DLW	8,440	35.20
" 6.....	17625	CIL	1,460	3.73
" 6.....	13540	BCR	9,270	22.80
" 6.....	27227	CBQ	4,740	25.09
" 7.....	54396	CP	3,650	22.94
" 7.....	17420	CI&L	2,275	9.93
" 7.....	22172	Soo	6,720	5.91
" 7.....	7027	EJ&E	19,910	50.48
" 7.....	9551	NP	4,960	10.76
" 7.....	17290	Soo	1,770	7.57
" 7.....	71652	STP	5,960	12.81
" 7.....	4780	NP	4,570	13.37
" 7.....	15996	G	7,720	47.95
" 9.....	2669	NP	8,800	32.11
" 9.....	83896	PM	5,490	18.95
" 9.....	22920	GN	7,525	5.99
" 9.....	20144	Soo	5,590	16.89
" 9.....	22106	GN	2,950	7.32
" 9.....	55124	IC	4,510	17.41
" 9.....	30309	G	3,180	8.40
" 9.....	3206	StLRC	4,330	10.67
" 9.....	30281	G	6,880	32.41
" 10.....	17332	G	2,965	22.81
" 10.....	30294	G	4,070	21.90
" 10.....	30254	G	3,940	5.89
" 10.....	30170	G	7,600	21.96
" 10.....	30150	G	8,795	17.17
" 10.....	8669	MDT	5,720	11.97
" 10.....	13088	GN	7,840	35.54
" 10.....	30285	G	1,070	3.20
" 10.....	30214	G	6,540	19.58
" 10.....	680	G	3,140	11.07
" 10.....	41710	NP	12,370	71.23
" 10.....	14232	NYDL	11,770	20.38
" 11.....	18698	NP	6,540	40.80
" 11.....	41358	NP	1,845	10.92
" 11.....	30218	G	1,940	1.72
" 11.....	35855	NP	11,510	28.79
" 11.....	30245	G	7,255	14.64
" 11.....	30342	G	4,620	18.17
" 11.....	8248	KC	5,460	12.16
" 11.....	33128	NP	19,000	29.11
" 11.....	30318	G	14,840	32.74
" 12.....	30254	G	1,420	4.14
" 12.....	10144	BCR	2,970	9.12
" 12.....	17038	NP	2,800	6.64
" 12.....	16944	GN	10,140	21.27
" 12.....	14150	GN	7,460	35.78
	96 cars		593,432	1,842.34

CHICAGO GREAT WESTERN RAILWAY COMPANY.

Statement of all less-than-carload lots loaded at Minneapolis during first twelve days of June.

Date.	Car No.	Initial.	Weight.	Revenues.
June 1.....	14954	FGE	9,555	$31.47
" 1.....	16694	G	11,610	32.19
" 1.....	10038	LEW	17,085	42.69
" 1.....	2660	KC	5,970	15.65
" 1.....	5468	ARL	3,850	15.38
" 1.....	12486	Big 4	7,570	31.69
" 1.....	3042	ARL	2,410	11.90
" 2.....	18462	BN	2,515	6.54
" 2.....	18463	BN	7,830	26.45
" 2.....	13580	MDT	14,485	31.92
" 2.....	44204	NYC	19,865	41.87
" 2.....	1619	A&Co	10,285	22.73
" 2.....	5156	SFRD	3,490	20.06
" 3.....	35486	DLW	17,915	42.70
" 3.....	10987	LEW	11,640	26.63
" 3.....	90808	NYC	6,411	16.88
" 3.....	13388	G	9,870	22.35
" 3.....	17442	G	6,940	23.74
" 3.....	29805	DLW	6,765	24.69
" 3.....	66167	B&O	6,425	23.29
" 3.....	43363	PM	15,510	119.87
" 5.....	96360	PRR	9,680	38.20
" 5.....	2554	G	5,955	12.38
" 5.....	61310	CV	10,720	27.02
" 5.....	4450	SFRD	6,120	30.17
" 6.....	11854	MDT	17,470	83.52
" 6.....	30113	G	5,375	14.37
" 6.....	68261	PRR	12,800	32.25
" 6.....	60072	G	13,655	45.49
" 6.....	46160	LS	8,910	21.84
" 6.....	30561	LS	4,360	25.38
" 6.....	3401	ARL	7,040	26.04
" 7.....	34525	DLW	6,800	24.52
" 7.....	34528	DLW	9,315	32.87
" 7.....	13958	G	5,575	14.56
" 7.....	11963	MC	13,775	30.65
" 8.....	3495	SFRD	20,865	60.25
" 8.....	4012	CRL	6,410	17.38
" 8.....	3761	DSSA	16,940	40.19
" 8.....	17352	G	8,531	18.78
Carried Forward.....	40 cars		388,302	$1,226.15

Date.	Car No.	Initial.	Weight.	Revenues.
Forward	40 cars		388,302	$1,226.15
June 8.....	2083	CBT	5,070	$19.01
" 8.....	45019	LS	7,330	39.28
" 8.....	15596	G	8,480	41.78
" 9.....	30248	G	700	.75
" 9.....	46314	G	15,955	46.00
" 9.....	50424	G	11,715	26.83
" 9.....	13580	G	12,035	27.21
" 9.....	30289	G	4,030	11.70
" 9.....	9091	ARL	4,650	23.09
" 10.....	14023	NYC	7,435	10.85
" 10.....	14271	FGE	5,385	12.70
" 10.....	90200	NY	11,768	32.10
" 10.....	12662	G	15,075	57.86
" 10.....	29442	GT	10,830	96.41
" 10.....	8070	ARL	3,320	14.82
" 10.....	9424	ARL	13,265	27.41
" 12.....	5156	SSW	24,608	44.01
" 12.....	14838	MC	4,390	10.28
" 12.....	954	JDS&CO	7,851	20.19
" 12.....	50276	G	1,625	6.79
" 12.....	1707	CBQ	7,810	30.93
TOTALS	61 cars		571,629	$1,826.15

CHICAGO GREAT WESTERN RAILWAY COMPANY.

Statement of all less-than-carload lots loaded at Minneapolis during first twelve days of October.

Date.	Car No.	Initial.	Weight.	Revenues.
Oct. 2	1258	G	7,792	$23.15
" 2	6378	O	9,480	25.10
" 2	12878	G	11,685	36.28
" 2	55384	IC	7,100	30.65
" 2	17205	FGE	9,030	50.61
" 3	14137	NYD	8,664	29.20
" 3	363	URT	12,905	32.86
" 3	1516	MRD	17,813	37.35
" 3	42655	IC	11,060	32.38
" 3	10568	FSM	1,840	7.45
" 3	11184	G	7,782	46.43
" 3	30252	G	25,860	109.13
" 4	1880	G	12,092	30.25
" 4	12400	G	13,073	25.90
" 4	4028	SLSW	13,277	36.54
" 4	30270	G	9,260	46.27
" 4	9280	KC	8,030	30.17
" 5	322	G	14,772	39.92
" 5	17606	G	3,590	8.84
" 5	46286	G	10,280	27.93
" 5	300	FRC	5,545	25.30
" 5	65188	NP	15,624	60.61
" 5	8130	ARL	7,122	35.32
" 6	46204	G	11,023	32.26
" 6	119816	Pa	6,430	14.75
" 6	44117	LSMS	18,540	35.31
" 6	314	FRC	6,685	9.14
" 6	47571	LSMS	9,154	46.64
" 6	30334	G	8,600	35.84
" 7	105	CFX	8,549	23.66
" 7	13708	G	13,965	51.73
" 7	47823	LSMS	12,157	51.81
" 7	5634	SFRD	13,630	66.13
" 9	30230	G	8,839	25.06
" 9	30127	G	8,425	18.61
" 9	30162	G	12,759	29.62
" 9	4919	SFRD	5,735	18.87
" 9	30323	G	7,950	35.26
" 10	8841	MDT	12,010	29.44
Carried Forward	39 cars		408,227	$1,351.77

Date.	Car No.	Initial.	Weight.	Revenues.
Brought Forward	39 cars		408,227	$1,351.77
Oct. 10.....	30140	G	8,498	$19.83
" 10.....	30314	G	15,180	35.99
" 10.....	14228	MKT	12,992	35.07
" 10.....	4770	KCS	7,280	33.48
" 10.....	8315	ARL	14,940	64.73
" 11.....	7819	AGS	8,636	18.10
" 11.....	11090	G	18,824	33.06
" 11.....	16804	G	6,035	14.82
" 11.....	44375	LSMS	5,613	16.76
" 11.....	67087	Wab	11,195	40.88
" 11.....	60024	G	7,163	35.01
" 11.....	15702	G	10,990	82.11
" 12.....	11640	AL	11,684	28.32
" 12.....	20527	NYCH	5,870	20.73
" 12.....	46282	G	22,362	47.12
" 12.....	69920	LV	10,757	24.59
TOTALS	55 cars		586,246	$1,902.37

RECAPITULATION OF TOTALS.

	No. Cars.	Weight.	Revenues.
From St. Paul, (June).....	94	510,961	$1,688.60
From St. Paul, (October).....	96	593,432	1,842.34
From Minneapolis, (June)	61	571,629	1,826.15
From Minneapolis, (October), ..	55	586,246	1,902.37
	306	2,262,268	$7,259.46
Average per car		7,399	$23.72

The statement covers all State and Interstate business—some of the cars went through to Chicago, some to Kansas City and some to Omaha.

CHICAGO GREAT WESTERN RAILWAY COMPANY.

Statement of all less-than-carload lots loaded at Mankato during the first twelve days of June.

Date.	Car No.	Initial.	Weight.	Revenues.
June 1	8328	K	5,215	$13.81
" 2	8690	K	3,150	5.60
" 2	30148	G	5,366	17.82
" 3	9832	K	3,715	6.07
" 3	34	MMCO	4,240	6.71
" 5	30304	G	5,330	9.29
" 6	934	M	2,010	2.24
" 6	9284	K	1,810	3.04
" 7	7088	G	4,580	5.05
" 7	48	G	5,060	11.35
" 8	580	G	7,770	9.12
" 8	9502	MDT	415	1.10
" 9	182	G	4,890	5.63
" 9	30113	G	6,830	10.41
" 10	7324	G	655	1.10
" 12	8916	G	2,055	4.18
" 12	4012	ARL	1,045	2.18
TOTALS	17 cars		64,136	$114.70

CHICAGO GREAT WESTERN RAILWAY COMPANY.

Statement of all less-than-carload lots loaded at Mankato during the first twelve days of October.

Date.	Car No.	Initial.	Weight.	Revenues.
Oct. 2	13728	NYD	3,995	$6.79
" 2	9280	K	840	3.93
" 3	9558	K	3,505	5.10
" 3	97683	B&O	820	2.95
" 4	30334	G	4,540	7.39
" 5	13189	MDT	1,230	2.08
" 5	30334	G	2,845	4.92
" 5	30198	G	475	1.50
" 6	1452	G	8,000	11.68
" 6	11128	G	920	1.30
" 7	85827	B&O	2,870	5.34
" 9	30219	G	650	.81
" 9	67087	Wab	7,805	23.78
" 10	30170	G	2,500	4.14
" 11	30188	G	7,954	11.10
" 11	119816	PRR	4,685	14.55
" 12	22106	GN	2,220	3.46
" 12	30127	G	5,960	15.42
TOTALS	18 cars		61,814	$126.24

RECAPITULATION OF TOTALS.

	No. Cars.	Weight.	Revenues.
From Mankato, (June)	17	64,136	$114.70
From Mankato, (October)	18	61,814	126.24
	35	124,950	$240.94
Average per car		3,570	$6.74

CHICAGO GREAT WESTERN RAILWAY COMPANY.

Statement of Through Cars from Minneapolis to Chicago, first 12 days of October, 1905.

Date.	Number of Cars.	Weight.
2	38	1,984,410
3	61	3,318,426
4	17	800,610
5	21	972,480
6	33	1,761,040
7	51	2,561,350
9	39	1,995,470
10	21	1,011,745
11	44	2,206,097
12	34	1,754,350
13	19	920,210
14	27	1,355,215
Total	405	20,641,403
Average per car		50,960
Weight of Car (Estimated)		30,000
Total weight, Car and Contents		80,960
Percentage of Pay Load		63.

CHICAGO GREAT WESTERN RAILWAY COMPANY.

Statement showing the number of 100 ton miles (of cars and contents) exclusive of engine, tender and caboose, hauled by way freight trains on the division St. Paul to Oelwein, in October, 1905, together with the cost in wages and coal at $3.00 per ton.

Way Freight Trains.

	100 Ton Miles.	Wages.	Coal, Tons.	Cost.
Oct. 1	0	0	0	0
" 2	2,457	$105.15	40.5	$121.50
" 3	2,964	104.26	46.	138.00
" 4	2,750	115.68	40.5	121.50
" 5	2,716	90.38	40.5	121.50
" 6	2,839	108.79	46.	138.00
" 7	2,118	85.92	37.5	112.50
" 8	0	0	0	0
" 9	0	0	0	0
" 10	1,477	93.64	29.	87.00
" 11	3,141	114.46	46.5	139.50
" 12	2,810	115.43	42.	126.00
" 13	2,966	124.31	48.	144.00
" 14	3,125	120.59	49.	147.00
" 15	0	0	0	0
" 16	0	0	0	0
" 17	1,762	69.02	25.	75.00
" 18	2,411	115.67	38.5	115.50
" 19	2,452	111.18	32.	96.00
" 20	1,457	71.95	24.5	73.50
" 21	2,877	117.32	40.5	121.50
" 22	0	0	0	0
" 23	2,506	114.99	36.	108.00
" 24	2,678	110.78	44.	132.00
" 25	1,696	83.14	34.	102.00
" 26	3,098	121.22	42.5	127.50
" 27	2,446	111.61	41.5	124.50
" 28	2,086	79.59	34.5	103.50
" 29	0	0	0	0
" 30	2,237	115.38	44.5	133.50
" 31	2,173	107.57	39.5	118.50
Total way freights	59,242	2,508.03	924.5	$2,827.50
Throught freight trains	469,014	$8,747.21	5,223.5	15,670.50
All Freight Trains	528,256	$11,255.25	6,166.0	$18,498.00

CHICAGO GREAT WESTERN RAILWAY COMPANY.

Statement of all the less-than-carload and carload freight shipped on the Chicago Great Western Railway (proper) between all stations from Minneapolis to Taopi, covering all freight shipped during the month of June, 1905, which would be affected by the schedule proposed by the Minnesota Commission.

	Weight	Revenue received	Revenue under proposed rate	Revenue under Iowa rate	
Totals.....	764,638	$1,655.88	$1,283.69	$1,160.18	Shipped under terminal schedule
Totals.....	84,093	96.39	81.30	87.25	Shipped under mileage schedule
Grand total..	848,731	$1,752.27	$1,364.99	$1,247.43	
Reduction ...			387.28	504.84	
Percentage of reduction.			22.1%	28.8%	
Average distance hauled.....54.1 miles					

CHICAGO GREAT WESTERN RAILWAY COMPANY.

Statement of all classified freight loaded at and shipped from DES MOINES, IOWA, during fifteen days in June and fifteen days in October, 1905.

	Weight. lbs.	Revenue.	No. of Cars Used.
Fifteen days of June	706,872	$1,061.34	141
Fifteen days of October	587,085	872.14	150
	1,293,957	$1,933.48	291
Average per car	4,446	$6.64	...

Average number of cars used per day..... 9.7, made necessary by loading separate cars to separate way-freight divisions, in order to expedite delivery.

Average distance freight was hauled, (June)..... 62.05 miles.
Average distance freight was hauled, (October)..... 66.00 miles.
Average distance each car was hauled, (estimated).....125.00 miles.

The Chicago Great Western Railway runs both East and West from Des Moines, Iowa. Hence, the above represents the total classified tonnage shipped on practically two lines—one running East, one running West—while the Great Western line out of St. Paul only goes in one direction.

Des Moines, Iowa, is the largest jobbing city in Iowa, with the exception of Sioux City, whose business in Iowa is small.

ADDITIONAL STATISTICS.

"In fact, the only thing which stands between the present prosperity of the railroads of the United States and utter bankruptcy **is the insignificant amount of one mill per ton per mile in their average rates.**" (See Page 23 of the Argument.)

STATISTICS FROM POOR'S MANUAL.

Showing the aggregate dividends paid by all the Railways of the United States, and the loss of revenue which a reduction of one mill per ton per mile would have caused.

YEAR	Aggregate Dividends Paid	Aggregate reduction of one mill	Excess of loss over dividends	Excess of dividends
1900	$119,288,879.	$141,162,109.	$21,873,230.	
1901	132,162,935.	148,959,303.	16,796,368.	
1902	151,019,537.	156,624,166.	5,604,629.	
1903	164,549,147.	171,292,198.	6,743,051.	
1904	188,386,093.	173,628,034.		$14,758,059.
1905 not yet compiled				
Pennsylvania Railroad 1904	$17,933,000	$14,223,415.		$3,709,585.

If the Pennsylvania Railroad, the largest and regarded as the most substantial railroad property in the nation, had suffered a loss of one mill per ton per mile, its dividend in 1904 would have been cut to one per cent., which would have caused a financial panic, ruining banks and causing general disaster throughout the country.

With the enormous tonnage of 3,722,881 tons per mile of road, largely coal, iron, etc., which enabled it to make an average car loading of 23.47 tons per car and an average train load of 500 tons, the Pennsylvania Company received in 1094—.605 cents per ton per mile, against the Chicago Great Western's, with only 885,028 tons per mile of road, an average car loading of 14.36 tons, and an average train load of 296 tons, .7 cents per ton per mile.

One mill per ton per mile is ½ cent to cwt. for fifty miles haul; 1 cent per cwt. for one hundred miles; 2 cents per cwt. for four hundred miles.

The fourth class rate is the 50 per cent. average rate of the Commissioners' proposed schedule.

The proposed reduction of this rate below the lowest schedule now in effect in Minnesota, which is already too low, is 4.6 cents at 50 miles; 4.7 cents at 100 miles; and 10 cents at 400 miles.